Monitoring of supply in the National Electricity Market

March 2019 Report

15 March 2019
Summary

Energy affordability remains a top-order issue for Australians. In August 2018, the then Treasurer, the Hon. Scott Morrison, MP, directed the Australian Competition and Consumer Commission (ACCC) to hold a long-running public inquiry into the supply of electricity in the National Electricity Market (NEM). This is the ACCC’s first report in this inquiry.

The inquiry will run for seven years, ending on 31 August 2025, with the ACCC required to report no less frequently than every six months. The ACCC will also provide information to the market as appropriate. This first report focuses on setting out the analytical framework for monitoring and provides information about expectations of market outcomes and market participant behaviour, as required under our Terms of Reference.

We released a Discussion Paper consulting on the approach we should take in this new inquiry and received 25 submissions, which we have taken into account in setting out our intended approach in this report. In particular, there was strong support from stakeholders to continue the types of analysis that we undertook in our Retail Electricity Pricing Inquiry (REPI) that the ACCC conducted over 2017–18. We intend to continue much of this type of analysis over the course of this new inquiry.

The ACCC’s final REPI report examined the many causes of problems in the NEM and set out a comprehensive package of 56 recommendations to bring down prices and restore consumer confidence and Australia’s competitive advantage. These recommendations spanned the entire supply chain and focused on four key areas:

1. boosting competition in generation and retail
2. lowering costs in networks, environmental schemes and retail
3. enhancing consumer experiences and outcomes
4. improving business outcomes.

As set out in this report, on the basis of publicly available information, there does not appear to have been any significant change in market conditions in the six to nine months since we delivered our final REPI report on the key issues of concern underlying our recommendations.

As required by the Terms of Reference, the ACCC under this current inquiry will be monitoring the progress on the implementation of these recommendations and monitoring the effects of policy changes in the NEM, including those resulting from our REPI recommendations.

Under our Terms of Reference, the ACCC will also specifically be monitoring:

- retail prices, including the level and spread of price offers and how wholesale prices are influencing retail prices and whether any wholesale cost savings are being passed through to retail customers
- wholesale market prices
- profits being made by generators and retailers
- contract market liquidity.

To date, there have been some welcome developments in response to a number of our REPI recommendations, while in a number of areas progress has been slow. Since our final REPI report, there have also been a number of market developments that this report covers.

Reforms to retail pricing and advertising should reduce prices and improve competition

The ACCC welcomes moves by the Australian Government towards implementing several recommendations from our REPI related to retailer pricing and advertising for New South Wales (NSW), South East Queensland and South Australia (SA). A default market offer (DMO) price that will be a maximum price for standing offers and will be used as a common reference bill against which all offers must be compared, as well as rules around advertising of conditional discounts, will bring down prices significantly for over half a million consumers on excessive standing offers and will help other customers to identify a better deal. While these reforms will not apply in Victoria, we also acknowledge parallel changes that are being introduced by the Victorian Government.

Standing offers were originally intended as a default safety net for consumers who were not engaged in the market. However, the ACCC found in the REPI that many retailers had high-priced standing offers and this was causing financial harm to consumers. The DMO price, which is to be set by the Australian Energy Regulator (AER), will therefore bring down prices for customers currently on excessive standing offers by capping the price that retailers can charge those customers.

Retail offers more generally have a variety of price structures comprising a mix of fixed and variable charges, which adds to the complexity when trying to compare offers. In contrast, the DMO price will be expressed as an annual price amount, based on benchmark consumption levels, and retailers will be required to advertise their offers in comparison to this common benchmark. Therefore, as a reference bill, the DMO price will also help customers more easily compare offers and identify a better deal.

These changes are particularly welcome at a time when recent data shows that retailers continue to advertise offers in a way that leads to confusion about what represents a better deal. For example, the upper panel of figure A below shows the annual price amount for a range of different offers in the Powercor distribution zone in Victoria as at January 2019. The offer with the highest advertised conditional discount of 43 per cent ($1460) is $181 more expensive than the cheapest offer with no advertised discount ($1279) as a result of different underlying charges.

The lower panel of figure A highlights another concern for the ACCC, which is retailers advertising offers with ‘headline’ discounts that are conditional on, for example, the customer paying on time. In particular, the figure shows the additional cost for each offer if the conditions are not met, such as paying your bill a few days late, noting that in some cases the discounts apply to the entire bill while in other cases the discounts only apply to the usage component of the bill. The highest is for an offer with a 34 per cent discount off the entire bill. If the conditions are not met, then the annual price amount increases by $859 to $2528, which is $364 more than the most expensive offer with no discount attached ($2164). In addition to adding to the confusion for customers, the ACCC found in the REPI that these additional costs reflected unreasonable penalties for not meeting conditions, often for those least able to afford it.

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The ACCC therefore also strongly welcomes the Australian Government’s implementation of rules preventing retailers from advertising conditional discounts as their ‘headline’ discount and its rule change request to the Australian Energy Market Commission seeking to limit conditional discounts to the reasonable savings to the retailer.\(^4\)

These are much needed reforms to remedy the dysfunctional state of energy retailing that we currently see and improve outcomes for customers. The ACCC will have an enforcement role under the mandatory code that will be established under the *Competition and Consumer Act 2010* (Cth) (CCA). We will undertake this role alongside our general enforcement role under the Australian Consumer Law, which prohibits misleading and deceptive conduct. Of course, retailers need not wait until there is a legislative requirement or standardised reference bill amount in place in order to improve some of their current advertising practices.

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We will be monitoring the effect of these reforms on the market, including the level and spread of offers and retailer practices, noting that some parties have claimed that the introduction of the DMO price will lead to higher prices for some customers.

Some retailers have recently given discounts off some of their standing offers and we would not expect retailers to reverse these decisions merely because the DMO price is set at a higher level. As the DMO price is a maximum price, there is no basis or requirement for standing offers which are currently below this level to be increased to the DMO level. These discounted offers appear to reflect retailers’ determinations of a more appropriate level of standing offer for particular customer groups and we would not expect this to change with the introduction of the DMO.

We also expect the reforms will result in clearer advertising practices, improving the state of competition and improving outcomes for many customers.

Our analytical framework for the retail market intends to monitor behavioural and performance-based characteristics using a range of quantitative and qualitative measures in order to make an assessment of the level and effectiveness of competition and outcomes for customers. This means that we expect to collect information and report on:

- compliance of standing offer levels not being higher than the DMO price
- retail market structure
- retailer advertising practices, including their compliance with new rules concerning the reference bill and ‘conditional’ discounts
- level and spread of retail prices, including how these change following the implementation of the DMO price
- underlying costs of a customer’s bill
- retail product and service differentiation and innovation
- customer awareness, understanding and participation in the market.

A significant transformation is occurring in the wholesale market

A significant transformation is taking place in the wholesale market, with the NEM moving from significant coal-fired generation to more renewable sources of energy.

Wholesale electricity prices continue to be high and hit extreme levels in January 2019. The longer-term increase in wholesale prices is largely due to a tightening in supply/demand conditions and, to a lesser extent, increasing fuel costs. The exit of large coal-fired generation units has also resulted in higher priced generators, such as gas, setting the price more often. Forward prices suggest that wholesale price levels should have peaked in Q1 2019 and that prices may decrease to $59–71/MWh in the off peak quarter of Q4 2020. Recent extreme spot price events in January have pushed the forward curve up and peak season contract prices for Q1 2020 suggest another expensive summer ahead.

High temperatures and several outages of coal-fired generators in Victoria led to supply shortages in Victoria and SA and resulted in the settlement price exceeding $10 000/MWh for hours on the 24th and 25th of January in both states. Monthly average prices for each state were above $300/MWh.

Replacement generation is needed to cover the exit of coal-fired generation. Significant new investment is coming into the NEM, with approximately 8000 MW of committed investment in generation expected to come online in 2019 and 2020.

In addition, there are a variety of government policy initiatives that have commenced to bring more generation into the market and improve market outcomes. These include the Australian Government program to underwrite new generation investment.

As set out in the REPI, the ACCC considers that the scheme will be most effective in reducing the impact of wholesale prices on consumers if: the scheme facilitates new entrants into the wholesale
Monitoring of supply in the National Electricity Market

The Australian Government has recently committed $1.4 billion to the Snowy 2.0 project. The additional pumped hydro will be useful to firm the increasing penetration of renewables in the NEM. The ACCC notes that, should it go ahead, Snowy 2.0 would give Snowy Hydro a very large proportion of flexible generation capacity in NSW and Victoria. The ACCC will continue to monitor the progress of the Snowy 2.0 scheme and its impact on the wholesale and contracts markets.

The ACCC’s approach to monitoring the wholesale market will be largely informed by competition analysis, and whether there are inefficiencies or failures that are impeding competitive forces. Our analysis of the wholesale market will have regard to the design of the NEM and how that design affects market outcomes and the behaviour of participants. In particular, the ‘energy-only’ nature of the NEM is designed to arrive at the ‘efficient’ price for the supply of wholesale electricity, with occasional high price events necessary to give the appropriate signals for new generation capacity to enter the market when needed.

However, while the energy-only design of the NEM means (when working well) the market should deliver efficient prices, it is a design that is vulnerable to the exercise of market power.

As well as drawing on public sources of information and monitoring already being undertaken by other bodies, the ACCC’s wholesale monitoring activities will focus on areas of the supply chain that cannot be adequately assessed using public information, such as:

- the wholesale market costs incurred by retailers (i.e. the ‘cost stack’) and the influence wholesale costs have on retail prices
- contract market activity and behaviour
- issues requiring deeper investigation and analysis, such as market power and barriers to entry in the wholesale market.

Excessive network investment results in higher than needed customer bills

Historical over-investment in publicly-owned networks in Queensland, NSW and Tasmania have added significantly to Network Service Providers’ (NSP) regulated asset bases (RAB), and are the primary contributor to higher electricity prices in those states.

The RABs of NSPs feed into retail prices through the allowed revenues that NSPs earn. NSPs charge retailers regulated prices and these costs are passed on to consumers in their bill. An NSP’s regulated allowed revenue includes both a return on capital, at a regulated risk-adjusted rate, and a return of capital, or depreciation, which enables the NSP to recover its entire capital investment, given by the RAB, over the economic life of the asset. To the extent that RABs don’t reflect an efficient level of investment, higher network charges are directly passed through to customers in the form of higher prices.

The Grattan Institute estimated that the over-investment in regulated network assets across the NEM was approximately $20 billion (out of an aggregated NEM regulated asset base of $90 billion), with $18.5 billion of that excess capital expenditure residing in Queensland and NSW networks alone.

In the REPI we recommended that, with appropriate assistance of the Australian Government, the state governments of Queensland, NSW and Tasmania, as existing or past asset owners, should take immediate remedial steps to improve affordability for electricity customers through a voluntary write-down of those asset bases or through the provision of rebates on network charges for privatised assets. This would save at least $100 a year for average residential customers in those states.

The lack of progress on this recommendation means that inefficiently high electricity prices continue to impact economic and social activity, particularly for households and energy-intensive industries in Queensland, NSW and Tasmania. The ACCC reiterates its recommendation to governments to take
action to remedy this. The ACCC accepts that the costs of writing down excessive RABs would involve a potentially large one-off cost to governments. However, reducing the unnecessarily high cost of electricity across the economy would result in increased productivity and growth and, overall, enhance welfare. Such a move would be an important microeconomic reform.

There is a significant wave of new investment planned under the Australian Energy Market Operator’s inaugural Integrated System Plan (ISP), which sets out the NEM’s overall transmission system requirements over a 20-year horizon. A multi-billion dollar investment program is proposed. It will be important that regulatory reviews associated with ISP projects involve broad stakeholder consultation and a comprehensive cost benefit analysis to ensure that expenditure is efficient and any future network costs passed on to the consumer are kept to a minimum.

We will monitor the impact of network costs on overall retail costs as part of our inquiry.

More work needed on environmental schemes

Since the REPI, the Australian Government has decided not to progress with the emissions obligation component of the National Energy Guarantee (NEG). The NEG aimed to align greenhouse gas emissions goals and NEM system reliability targets into a single policy framework.

The Australian and state governments in the NEM have introduced environmental policies to incentivise the uptake of renewable generation, encourage businesses and households to become more energy efficient, and reduce carbon emissions in line with Australia’s international commitments. To achieve this, environmental schemes have typically imposed costs that are passed on to electricity users through their electricity bills.

Significant uptake of solar photovoltaic systems has delivered benefits to system owners, the environment, and at times the network, while the cost has been borne by all electricity consumers. In 2018, there were over 200,000 systems installed with a combined capacity in excess of 1.4 GW. It is likely that state-based rebate programs will continue to fuel growth in the number of solar installations in future years.

Electricity retailers pass the costs that they incur in complying with their obligations under the Small-scale Renewable Energy Scheme (SRES) directly through to electricity customers. In the absence of SRES, electricity costs would be commensurately lower.

In the REPI, we recommended that the SRES should be wound down and abolished by 2021. We reiterate this, given the scheme is expected to cost the average residential customer in the NEM $36 in 2020-21. The ACCC believes that the subsidy of small-scale installations is no longer required given the dramatic fall in the cost of solar installations since the inception of the scheme in 2011.

This is another area where the Australian Government could act to have a positive impact on customer bills.

While each environmental scheme remains in place, we intend to monitor the costs of complying with environmental schemes.

The ACCC will be publishing regular reports on the NEM

The ACCC consulted on the analytical framework that is to apply in our future reports, and we intend to consult further where appropriate to inform our monitoring work over the course of the inquiry. We will be using our compulsory information gathering powers where necessary, together with making use of publicly available information and analysis performed by other bodies with existing monitoring roles to inform our monitoring.

We intend to minimise the duplication of efforts and imposts on stakeholders across these activities. Of particular relevance is the AER’s monitoring and reporting activities. As bodies established under the CCA, in undertaking our respective responsibilities, we will work collaboratively on overlapping areas, to the extent to which we are able, without compromising our respective abilities to provide independent analysis and advice to government, and to administer energy market regulations.
# List of abbreviations

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<td>AEC</td>
<td>Australian Energy Council</td>
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<td>AEMC</td>
<td>Australian Energy Market Commission</td>
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<td>AEMO</td>
<td>Australian Energy Market Operator</td>
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<td>AER</td>
<td>Australian Energy Regulator</td>
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<td>AFMA</td>
<td>Australian Financial Markets Authority</td>
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<td>ASX</td>
<td>Australian Securities Exchange</td>
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<td>ATO</td>
<td>Australian Taxation Office</td>
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<td>BEAP</td>
<td>Business Energy Advice Program</td>
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<td>CALC</td>
<td>Consumer Action Law Centre</td>
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<td>CALD</td>
<td>culturally and linguistically diverse</td>
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<td>CARC</td>
<td>customer acquisition and retention costs</td>
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<td>CCA</td>
<td><em>Competition and Consumer Act 2010</em></td>
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<td>CDR</td>
<td>Consumer Data Right</td>
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<td>COAG</td>
<td>Council of Australian Governments</td>
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<td>CPI</td>
<td>Consumer Price Index</td>
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<td>CTS</td>
<td>costs to serve</td>
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<td>DMO</td>
<td>Default Market Offer</td>
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<td>DNSP</td>
<td>distribution network service provider</td>
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<td>EBIT</td>
<td>earnings before interest and tax</td>
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<td>EBITDA</td>
<td>earnings before interest, tax, depreciation and amortisation</td>
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<td>EBITF</td>
<td>earnings before interest, tax and fair value adjustments</td>
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<td>EEIS</td>
<td>Energy Efficiency Improvement Scheme</td>
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<td>ENA</td>
<td>Energy Networks Australia</td>
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<td>ESB</td>
<td>Energy Security Board</td>
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<td>ESCOSA</td>
<td>Essential Services Commission of South Australia</td>
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<td>ESC Vic</td>
<td>Essential Services Commission Victoria</td>
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<td>ESS</td>
<td>Energy Savings Scheme</td>
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<td>FCAS</td>
<td>frequency control ancillary services</td>
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<td>Finkel Review</td>
<td>Independent Review into the Security of the National Electricity Market</td>
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<td>FIT</td>
<td>feed-in tariff</td>
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<td>GST</td>
<td>goods and services tax</td>
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<td>GW</td>
<td>gigawatt</td>
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<td>GWh</td>
<td>Gigawatt hour</td>
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<td>IPART</td>
<td>Independent Pricing and Regulatory Tribunal</td>
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<td>kW</td>
<td>kilowatt</td>
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<td>kWh</td>
<td>kilowatt hour</td>
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<td>LGC</td>
<td>large-scale generation certificates</td>
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<td>LRET</td>
<td>Large-scale Renewable Energy Target</td>
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<td>LRMHC</td>
<td>long-run marginal cost</td>
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<td>MW</td>
<td>megawatt</td>
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<td>MWh</td>
<td>megawatt hour</td>
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<td>NECF</td>
<td>National Energy Customer Framework</td>
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<td>NEG</td>
<td>National Energy Guarantee</td>
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<td>NEL</td>
<td>National Electricity Law—a schedule to the National Electricity (South Australia) Act 1996 (SA)</td>
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<td>NEM</td>
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<td>NER</td>
<td>National Electricity Rules—made under National Electricity (South Australia) Act 1996 (SA)</td>
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<td>National Energy Retail Objective</td>
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<td>National Energy Retail Rules—made under National Energy Retail Law (South Australia) Act 2011</td>
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<td>NFF</td>
<td>National Farmers’ Federation</td>
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<td>NGR</td>
<td>National Gas Rules</td>
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<td>NSP</td>
<td>network service provider</td>
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<td>NSW</td>
<td>New South Wales</td>
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<td>OTC</td>
<td>over-the-counter</td>
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<td>OTTER</td>
<td>Office of the Tasmanian Economic Regulator</td>
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<td>PC</td>
<td>Productivity Commission</td>
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<td>PIAC</td>
<td>Public Interest Advisory Centre</td>
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<td>PV</td>
<td>photovoltaic</td>
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<td>QCA</td>
<td>Queensland Competition Authority</td>
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<td>QLD</td>
<td>Queensland</td>
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<td>QPC</td>
<td>Queensland Productivity Commission</td>
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<td>RAB</td>
<td>regulatory asset base</td>
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<td>REES</td>
<td>Retailer Energy Efficiency Scheme</td>
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<td>REPI</td>
<td>Retail Electricity Pricing Inquiry</td>
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<td>RERT</td>
<td>Reliability and Emergency Reserve Trader</td>
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<td>RET</td>
<td>Renewable Energy Target</td>
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<td>RIT</td>
<td>Regulatory Investment Test</td>
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<td>Regulatory Investment Test—Distribution</td>
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<td>RIT-T</td>
<td>Regulatory Investment Test—Transmission</td>
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<td>RPP</td>
<td>renewable power percentage</td>
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<td>RRO</td>
<td>Retailer Reliability Obligation</td>
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<td>SA</td>
<td>South Australia</td>
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<td>SEP</td>
<td>Strategic Energy Plan</td>
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<td>SRES</td>
<td>Small-scale Renewable Energy Scheme</td>
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<td>SRMC</td>
<td>short run marginal cost</td>
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<td>STC</td>
<td>small-scale technology certificates</td>
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<td>STP</td>
<td>small-scale technology percentage</td>
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<td>TAS</td>
<td>Tasmania</td>
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<td>TNSP</td>
<td>transmission network service provider</td>
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<td>ToU</td>
<td>time-of-use</td>
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<td>TUOS</td>
<td>transmission use of system</td>
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<td>TW</td>
<td>terawatt</td>
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<td>TWh</td>
<td>terawatt hour</td>
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<td>VCOSSE</td>
<td>Victorian Council of Social Service</td>
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<td>VCR</td>
<td>value of customer reliability</td>
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<td>VDO</td>
<td>Victorian Default Offer</td>
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<td>Description</td>
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1. Introduction

This section provides some background to the inquiry and sets out the structure of this report.

1.1 Terms of Reference of the inquiry

On 20 August 2018, the then Treasurer directed the ACCC to hold a public inquiry to monitor the prices, profits and margins in the supply of electricity in the National Energy Market (NEM). The inquiry is to provide its first report by 31 March 2019 and at least every six months thereafter until the conclusion of the inquiry on 31 August 2025.

The ACCC is to also provide information to the market as appropriate.

Matters to be monitored and taken into consideration in the inquiry include, but are not limited to:

- electricity prices faced by customers in the NEM including both the level and the spread of price offers, analysing how wholesale prices are influencing retail prices and whether any wholesale cost savings are being passed through to retail customers
- wholesale market prices including the contributing factors to these such as input costs, bidding behaviour and any other relevant factors
- the profits being made by electricity generators and retailers and the factors that have contributed to these
- contract market liquidity, including assessing whether vertically integrated electricity suppliers are restricting competition and new entry, and
- the effects of policy changes in the NEM, including those resulting from recommendations made by the ACCC in its Retail Electricity Pricing Inquiry (REPI) report of June 2018.

Where appropriate, the inquiry is to make recommendations to government(s) to take any proportional and targeted action considered necessary to remedy any failure by market participant(s) (or the market as a whole) to deliver competitive and efficient electricity prices for customers.

According to the direction, the inquiry’s first report is to focus on ‘setting out the analytical framework for monitoring and provide information about expectations of market outcomes and market participant behaviour’.

The full Terms of Reference of the inquiry is set out in Appendix A.

1.2 Retail Electricity Pricing Inquiry and recommendations

The current inquiry follows the ACCC’s REPI, which was undertaken on the direction of the then Treasurer and concluded on 30 June 2018. The final REPI report was published on 11 July 2018 and is available from the ACCC website.

The final REPI report contained recommendations to improve competition, lower costs and reduce prices across the supply chain, including:

- a prohibition on acquisitions in the generation market for existing generation portfolios with market shares in excess of 20 per cent
- restructuring of Queensland Government generation assets into three portfolios with separate ownership and operation

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5 ACCC, Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final Report, June 2018.
providing the AER with powers to address market manipulation in the wholesale market as well as increasing remedies in line with the Australian Consumer Law

- voluntary writedowns of regulated asset bases in Queensland and Tasmania and rebates to customers in NSW to deal with overinvestment in network assets in those regions
- state governments bearing any remaining costs of premium solar feed-in tariff schemes through their budgets
- government assistance to help certain new generation project proposals secure debt finance to encourage new entry, promote competition and to enable commercial and industrial customers to access low-cost new generation.

The ACCC also made a number of recommendations to enable consumers to better navigate the retail electricity market and choose electricity services that suit their needs, including:

- abolishing the standing offer and replacing it with a lower priced ‘default offer’ which can be priced no higher than a level determined by the AER
- requiring any advertised discounts to be unconditional and made with reference to the default offer
- restricting conditional discounts to reasonable savings to a retailer associated with the conditions being achieved
- a prescribed mandatory code of conduct for third-party intermediaries which includes the obligation that any recommended offer is in the best interests of the consumer
- improving and harmonising concession schemes including by applying a means test and instituting a hybrid approach including a fixed dollar amount to offset daily supply charges and a percentage discount to offset variable usage charges
- additional government funding (to a value of $5 per household in each NEM region, or $43 million NEM-wide, per annum) for a grant scheme for consumer and community organisations to provide targeted support to assist vulnerable consumers to improve energy market literacy.

These recommendations are now being considered for adoption by governments.

### 1.3 Consultation

On 21 November 2018, the ACCC released a Discussion Paper, seeking comment on:

- the analytical framework for monitoring, including the expectations of market outcomes and participant behaviour
- the measures to be used for monitoring
- monitoring the impact of policy developments
- the process and timing for the collection of information.


The collection and monitoring of information for future reports will involve the analysis of public information and regular issuing of information requests to market participants, including in the form of compulsory information gathering notices. The ACCC will endeavour to structure these requests in a way to balance the need for certain types of data and information with the burden associated with responding to such requests.
1.4 Structure of the report

This report is structured as follows:

- Section 2 sets out the analytical framework
- Section 3 examines retail prices and customer outcomes
- Section 4 looks at wholesale prices
- Section 5 considers network costs
- Section 6 examines environmental policy costs
- Section 7 sets out how information will be collected and a reporting schedule
- Appendix A contains the Terms of Reference
- Appendix B lists the stakeholders who made a submission to the Discussion Paper
- Appendix C contains a table of progress on REPI recommendations
- Appendix D provides a list of potential indicators for future monitoring.
2. Analytical framework

The analytical framework that the ACCC uses to undertake its monitoring role will shape the way it goes about this task, the data it collects, the analysis it undertakes, and the expectations of market outcomes and participant behaviour against which it views the monitoring results.

In this section, we:

- provide a summary of submissions to our Discussion Paper relating to the analytical framework
- discuss some selected other analytical frameworks that are relevant to our inquiry
- set out the ACCC’s approach to the analytical framework.

2.1 Submissions

The ACCC had sought feedback on three potential aspects of an analytical framework that may be relevant to the inquiry’s monitoring activities. They were:

- a market failure framework
- a legal framework
- a distributional or equity framework.

A large number of submissions addressed the topic of what analytical framework the ACCC should apply when undertaking its monitoring activities. While there is a diversity in the views on the relevance and efficacy of each of the three frameworks, there is a broad support in the submissions for a framework based on the three potential aspects identified by the ACCC.

There is support from a big cohort of interested parties for an analytical framework similar to the one proposed by the ACCC in our Discussion Paper. For example, Origin Energy (Origin), EnergyAustralia, Public Interest Advocacy Centre (PIAC), Ergon Energy and Agriculture Industries Energy Taskforce broadly agreed that all three potential aspects of an analytical framework identified by the ACCC are likely to be relevant to the inquiry’s monitoring activities.6

There were some interested parties with a preference for one framework over the other. For example, the Consumer Action Law Centre (CALC) and PIAC suggested focusing primarily on a distributional and equity framework.7 However, they also noted the relevance and importance of a legal framework and a market failure framework, which they argued would inform a comprehensive analysis of the market as well as help regulators identify breaches and take appropriate enforcement action.8 The National Farmers’ Federation (NFF) noted that it favoured both a market failure framework and a distribution or equity framework, rather than a legal and regulatory compliance one which it suggested should be a business as usual activity conducted by the regulatory bodies, but informed by issues surrounding market failure and distributional equity.9 The NFF also noted being neutral on the methodology provided it is credible, transparent and consistent.10

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There were also some specific suggestions by interested parties. For example, ERM Power noted that any framework should be developed with regard to the National Electricity Objective (NEO) and National Energy Retail Objective (NERO), given industry development has always used these objectives as a measure of achievement of economic efficiency. ERM Power also noted the need for the framework to have a long-term lens, i.e. whether market structures, policy changes and participant behaviour support an efficient market and the long-term interests of consumers.\(^{11}\)

AGL Energy (AGL) noted that any analytical framework for monitoring and analysis must take into consideration the current market design and that the analytical approach should focus on understanding the root causes of observable outcomes in the market.\(^{12}\)

ERM Power noted the need to assess whether the market is flexible to support on-going changes in technologies and the transition of supply sources.\(^{13}\) The transition in electricity markets was also noted by the Australian Energy Council (AEC). The AEC noted that analytical frameworks used in the past have been based on a historical model of power coming from large coal-fired power stations, owned by a large energy company and retailed one-way to passive, price-taking customers. The AEC observed that the current market is in a state of transition, through active customers and the emergence of new energy business models. Therefore, the AEC suggested the need for any framework to take this change into account. However, they also noted the need to recognise the complexity with transitioning markets and the challenges that may pose for a regulator.\(^{14}\)

EnergyAustralia noted the need for the monitoring framework to identify positive market outcomes and increase transparency on issues where there is a poor understanding of the markets. This, they argued, would improve trust in energy companies and avoid unnecessary or ‘suboptimal’ policy interventions.\(^{15}\) In addition to framework considerations, EnergyAustralia also noted the ACCC already has a relatively well-defined set of analysis and associated data in its final REPI report that can be carried forward.\(^{16}\)

PIAC suggested an additional framework to the three highlighted in the ACCC Discussion Paper. A Customer Outcome framework, PIAC noted, would assess the retail market through the lens of the outcomes for consumers, and take into account the consumers’ level of engagement and their level of ‘potential’ advantage.\(^{17}\)

Ergon Energy supported the application of a framework that can be evolved and amended over time to accommodate rapid changes in the industry.\(^{18}\)

In addition to the above overall feedback and suggestions, comments were also received on each of the frameworks specifically.

**Market failure framework**

AGL noted its support for an analysis that is based on the electricity market being an effective, competitive market. AGL submitted that the ACCC analysis must take into account the outcomes that should be reasonably expected in the context of an energy-only market, including the transition to low carbon technologies, generation fuel constraints, and the challenging regulatory and policy environment.\(^{19}\)

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PIAC submitted that consideration of issues through a market failure framework must include a qualitative dimension and that market failure may not be indicated by simple metrics related to the number of market participants and market participant or customer ‘activity’. PIAC made further observations in regards to barriers to entry and information asymmetry. PIAC noted that ‘barriers to entry may be indicated not only by the impact on potential number of market participants, but on their scope to make an impact on market outcomes and the behaviour of other participants’. PIAC also made an observation about the lack of transparency in the retail market and information asymmetry between consumer and retailer amounting to a market failure. PIAC suggested that reliance upon a market failure framework with no price regulation to deliver an essential service in electricity is not appropriate.

Origin noted that in using the market failure framework, the ACCC should be mindful that a single indicator or metric cannot be used to assess the health of the market. Origin added that given the cyclical nature of the market, a snapshot view or point in time observations can result in misleading conclusions and ultimately knee-jerk regulatory responses.

Legal framework

While AGL was supportive of a legal framework to better understand the current market operations and outcomes, it highlighted the need to consider the likely impact of proposed regulatory change and recent initiatives before introducing further interventions.

Certain stakeholders such as Meridian Energy Australia (Meridian Energy) had stronger views on a legal framework. Meridian Energy noted the analytical framework most relevant for the electricity market is a ‘legal framework analysis’ because it will highlight any deficiencies in the regulatory framework for a transitioning market and enable the development of a streamlined approach to regulation that supports a ‘future energy system’. Meridian Energy also cautioned that regulatory frameworks need to focus more on customer outcomes as opposed to compliance heavy reporting regimes. Highlighting of any deficiencies in the regulatory framework and subsequent law reform through a legal framework was also noted by the AEC.

Origin and Ergon Energy noted that the ACCC should draw on compliance reporting from the AER and various state-based regulators to form a view on market participants’ adherence to the rules and the suitability of the legislative framework.

There were also some specific suggestions on analysis that could be produced under a legal framework. For example, EnergyAustralia suggested that a legal framework could examine the data with a view to identifying any weaknesses or gaps in the regulatory framework. This, EnergyAustralia added, could also be useful for reporting through aggregated data or case studies to explain or support broader findings such as the numbers and types of compliance breaches.

PIAC suggested that ‘consideration of issues through a legal framework should evaluate compliance with the spirit and intent of legislation, not merely the narrow, ‘black-letter’ interpretation of the law.’

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20 Public Interest Advocacy Centre, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 21 December 2018, p. 2.
28 Public Interest Advocacy Centre, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 21 December 2018, p. 2.
A distributional or equity framework

Overall, there was support for a distributional or equity framework from various interested parties, although some submissions also noted pitfalls of using such a framework.

Both AGL and EnergyAustralia were supportive of market monitoring through a distributional or equity framework. In addition, both suggested some additional analysis. For example, AGL suggested assessment of whether vulnerable and hardship consumers are able to access targeted assistance, analysis of initiatives by other regulators and government bodies, and further consideration of the issues raised in the REPI regarding the cross-subsidisation that currently occurs in respect of solar feed-in tariff schemes and the Small-scale Renewable Energy (SRES). Similarly, EnergyAustralia supported the value in analysing customer characteristics, such as income distribution, in understanding customer churn and other customer behaviour.

The CALC and PIAC submitted that a distributional or equity framework is the most relevant approach, as the energy market should be assessed against its ability to provide access to affordable energy for all consumers, vulnerable or otherwise.

Similarly, the Victorian Council of Social Service (VCOSS) also supported an equity framework and noted that past analyses of the NEM have been overly focused on competition measures such as market concentration. It also noted the work within the final REPI report on vulnerable consumers and suggested continuation of similar analysis.

Both Origin and ERM Power noted the pitfalls of using this framework as they argued that associated metrics can be subjective and difficult to measure, and suggested an objective focus for analysis. Origin suggested some metrics and expected outcomes for tracking progress against a distributional or equity framework. Examples of suggested metrics and outcomes include a robust hardship regime across jurisdictions and customers in hardship being on the lowest-priced offers, assessment of Ombudsman complaints and disconnections, and the cross-subsidisation of solar feed-in tariff schemes for solar and non-solar customers.

2.2 Other relevant analytical frameworks

The ACCC notes that a number of other electricity market monitoring activities take place in the NEM. The ACCC has had regard to the analytical frameworks other regulators use to guide their monitoring activities.

In this section, we set out three other analytical frameworks that guide similar monitoring activities:

- the AER’s Wholesale electricity market performance monitoring reports
- the AEMC’s Annual retail market competition reviews
- the ESB’s annual Health of the NEM reports.

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We have reviewed these frameworks in order to inform our own approach to monitoring. We have also had regard to other monitoring reports in general, and have reviewed monitoring metrics and analysis undertaken in those reports to inform our own approach and identify areas of potential overlap. The relevant sections of this report make reference to a number of other reports that are relevant to particular monitoring activities that we will undertake.

2.2.1 AER Statement of approach for wholesale market performance monitoring

The AER uses a Structure- Conduct-Performance (SCP) framework for analysing the wholesale electricity markets for its Wholesale electricity market performance monitoring reports. The AER framework notes that one set of indicators cannot conclude if the market is competitive or efficient. The AER’s approach to each of the structure, conduct and performance indicators is explained below.

- The market structure analysis includes assessment of structural features such as market concentration and power, the extent of vertical integration and barriers to entry. In addition, market structure analysis also considers horizontal concentration.
  - The different types of barriers to entry covered in the SCP framework include structural barriers, strategic barriers as well as legal or regulatory barriers. This framework also includes barriers to exit analysis and uses a qualitative approach for both barriers to entry and exit analysis.
  - Vertical integration analysis in the SCP includes either qualitative or quantitative analysis.

- The market conduct analysis refers to understanding the relationship between different participants’ bidding behaviour and market outcomes. Some examples of firm behaviour analysis include the extent of any physical withholding of capacity in the market, rebidding to higher prices close to dispatch in order to limit competitive responses, market manipulation etc. This framework distinguishes from the misuse of market power which the AER notes is covered by the ACCC under the Competition and Consumer Act 2010 (Cth) (CCA).

- The market performance analysis under the SCP includes examining the efficiency of the market separately to the competitiveness of the market.
  - This includes analysis of whether electricity prices are determined in the long run by underlying costs of the market participants. Two possible approaches for estimating costs under the SCP framework are levelised cost of energy, that is the average cost of building and operating a generator of a specific technology over its assumed life cycle, and long run marginal cost (LRMC), which is the cost of meeting an incremental change in demand. These costs can be compared with average historical wholesale prices.
  - The market performance analysis also includes identifying and measuring inefficiencies in the wholesale market.

2.2.2 The AEMC’s retail market competition review framework

The Australian Energy Market Corporation (AEMC) has also been using a SCP framework in its retail market competition reviews and will use this framework again in the 2019 review.

Similar to the AER’s SCP framework, the AEMC framework considers the interaction between how a market is structured, the degree of competition between providers, behaviour of consumers, and, in turn, the outcomes the market delivers for consumers.

Also similar to the AER in wholesale monitoring analysis, the AEMC approach notes that a single set of indicators cannot be used to determine the effectiveness of competition in retail energy markets in the

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NEM. However, the AEMC includes a broad range of measures under each element of the framework that it uses to assess developments in the market (see table 2.1).

Table 2.1: AEMC’s Structure-Conduct-Performance framework overview

<table>
<thead>
<tr>
<th>Framework element</th>
<th>Measure</th>
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<tr>
<td>Structure</td>
<td>Barriers to entry/expansion and exit</td>
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<td></td>
<td>Market concentration/share</td>
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<td>Market conduct</td>
<td>Consumer activity and confidence</td>
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<td></td>
<td>Retail pricing strategy</td>
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<td></td>
<td>Retail energy prices</td>
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<td></td>
<td>Innovation and distributed energy services</td>
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<tr>
<td>Market outcomes/performance</td>
<td>Consumer outcomes/satisfaction</td>
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<td></td>
<td>Complaints</td>
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<td></td>
<td>Retailer margins</td>
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2.2.3 ESB Framework for the Strategic Energy Plan

The Energy Security Board (ESB) is responsible for overseeing a Strategic Energy Plan (SEP) for the NEM. The COAG Energy Council will review the SEP every 12 months and the ESB’s annual Health of the National Electricity Market report will assess progress against the SEP each year.

The architecture of the SEP, and the monitoring activities that will inform it, are outcomes-focused with five high-level outcomes each supported by a number of key objectives. Through the use of particular metrics, the ESB will assess whether those outcomes and objectives are achieved. The ESB is still in the process of finalising the metrics it will use to monitor progress against the SEP.

The five high-level outcomes of the SEP are:
1. affordable energy and satisfied consumers
2. secure electricity and gas system
3. reliable and low emissions electricity and gas supply
4. effective development of open and competitive markets (where appropriate)
5. efficient and timely investment in networks.

Figure 2.1 below sets out the ESB’s SEP and monitoring activities diagrammatically.

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43 ESB, Strategic Energy Plan—Consultation on proposed metrics, November 2018, p. 3.
The ESB’s activities are similar to the ACCC’s in that they encompass the entire supply chain. ESB outcomes (1) and (4) are particularly relevant to the ACCC’s work, and our approach to monitoring will incorporate these outcomes as goals and expectations for the market.

2.3 The ACCC’s analytical framework

Submissions to the Discussion Paper were broadly supportive of the three aspects of an analytical framework outlined by the ACCC, with there being some variety amongst submissions on the relative importance of each aspect. Some submissions raised concerns about specific aspects of the potential framework, while others cautioned against applying the framework too narrowly.

The ACCC will use all three aspects to guide its monitoring:

- Market failure aspects inform our assessment of competition, competitive dynamics, and market outcomes in the NEM, as well as motivate and guide deeper analyses into specific issues, such as barriers to entry and market power.
- Legal aspects will guide our assessment of specific conduct by market participants, as well as the impact of regulatory change and whether options for enforcement and compliance are sufficient to ensure market participant behaviour is optimal.
- Distributional and equity aspects will guide our assessment of consumer outcomes, and ensure that our monitoring and analysis continues to have regard to the essential service nature of electricity.

Different aspects will be more relevant for particular areas of our monitoring activities. The rest of this section provides a summary of how each aspect will inform monitoring activities in the wholesale and retail markets, networks and their regulatory regimes, and environmental schemes. Further details regarding likely monitoring activities are set out by supply chain sector as follows:

- Section 3: Retail markets and customer outcomes
- Section 4: Wholesale market
- Section 5: Network costs
- Section 6: Environmental policy costs.
The ACCC does not intend to define a specific structure to its monitoring framework (such as ‘Structure-Conduct-Performance’), or define specific monitoring metrics under each of the three framework aspects listed above. Given the presence of other monitoring activities in the NEM that utilise more structured frameworks, the ACCC will retain some flexibility over its monitoring activities, and may publish reports focused on specific issues from time to time alongside broader monitoring reports.

However, we note that over the course of the inquiry, the three aspects listed above will motivate analysis of the structure of the NEM and its component sectors, the conduct of market participants, and the performance of the NEM in delivering quality outcomes to consumers.

### 2.3.1 Retail markets

Retail electricity markets in the NEM are premised on competition between retailers to drive positive outcomes for consumers. The ACCC’s assessment of retail competition will be primarily informed by market failure analysis and will focus on whether retail markets are delivering efficient outcomes, and whether retailer conduct meets the expectations of a competitive market. Market failure analysis in the retail market will include monitoring activities such as:

- analysis of retail market structure, potential barriers to entry and expansion, and the level of concentration in the market
- price outcomes in the market, including the level and spread of prices, and differentiation and innovation by retailers
- analysis of overall levels of competition, with potential analysis of metrics such as profitability, expenditure on customer acquisition and retention, and the level of customer engagement.

However, retail markets in the NEM are also subject to a range of regulatory requirements, with some variation between regions. The behaviour of retailers is therefore influenced not only by competitive forces but also by these regulations. The CCA also provides a range of legal tools that the ACCC may use to pursue inappropriate conduct in the retail market.

We note that a number of submissions raised concerns about the level of regulation in the retail sector, and Meridian Energy’s submission emphasised that regulation should focus on consumer outcomes and not on compliance and reporting.

ERM Power’s submission noted that the ACCC’s framework should have regard to the NERO, as it is the legislated goal for retail energy markets and rules. We agree that it will be important to incorporate into our assessment the effect of policy and legislation, and the conduct of retailers and other market participants, including whether they are in pursuit of the NERO.

The legal component of our framework will assist the ACCC to undertake monitoring and investigative activities on issues such as:

- the pricing, discounting and advertising conduct of retailers and their impact on consumers (particularly with the default market offer (DMO) in place from 1 July 2019)
- the efficacy of existing regulatory regimes in the retail market
- the impact of new or changing regulation on retail market outcomes
- identifying potential breaches of the law and seeking appropriate enforcement outcomes.

Finally, as the retail market is the primary market through which consumers interface with the electricity sector, the distributional and equity aspects of our framework will also inform our retail monitoring activities.

We acknowledge the concerns raised by some stakeholders regarding the distributional and equity frameworks, in particular that these types of analysis can be subjective or difficult to measure. While we agree that distributional or equity outcomes should not be the primary focus of our analysis, it is important to recognise that electricity is an essential service and that highly inequitable market outcomes are unlikely to be acceptable to, or in the best interest of, consumers.
We also acknowledge PIAC’s suggested ‘Customer Outcome framework’. While the ACCC does not intend to adopt this framework specifically, we agree that the ultimate measure of the success of the retail market is the degree to which it delivers benefits to consumers.

Distributional and equity analysis will inform ACCC monitoring activities such as:

- the distribution of consumers across different offer types and price levels in the market
- the degree to which consumers are able to access and understand relevant price information and make informed choices
- the potential for policies to shift costs from one consumer type to another
- the impact of competitive outcomes and regulation on vulnerable and hardship customers.

### 2.3.2 Wholesale market

As with the retail sector, the wholesale market is primarily predicated on the competitive rivalry between suppliers in the market, in this case, generators of electricity. Market failure analysis will be core to understanding and analysing developments in the wholesale market, and to guiding any recommendations regarding changes to the market.

As noted in submissions, this analysis will need to incorporate the energy-only structure of the wholesale market and the increased potential for price volatility and transient periods of market power that such a market design creates.

Similarly, the ACCC agrees with submissions that caution against conflating the current transition occurring in generation technologies with market failure. The ACCC’s assessment of market dynamics will need to account for the changes occurring in the generation mix of the NEM.

Market failure analysis in the wholesale market will include monitoring activities such as:

- analysis of wholesale prices and trends, changes to demand and supply, and the responsiveness of consumers and suppliers to changes in prices
- analysis of market concentration, barriers to entry, the mix of generation technologies, and other market characteristics that may affect competition
- the interrelation with contract markets, and competitive dynamics in each.

The wholesale market and its participants are also subject to rules and regulations that affect their incentives and behaviour. As ERM Power noted in its submission, the NEO is core to many of these rules. As with the National Energy Retail Law (NERL) in retail, the ACCC does not anticipate that our monitoring and analysis activities will create expectations of market participants that would conflict with the NEO, but will seek to ensure that such conflicts do not arise.

A number of changes to how the wholesale market operates will come into effect during the ACCC’s inquiry, such as the move to five-minute settlement. These changes may significantly alter the incentives facing generators and motivate changes to the generation mix. It will be important to understand the impact of such regulatory changes.

The legal component of our framework will assist the ACCC to undertake monitoring and investigative activities on issues such as:

- bidding behaviour by suppliers into the NEM
- the impact of changes to market rules and regulations.

Given the strong market-based design of the wholesale market, distributional and equity analysis may not be prominent components of the ACCC’s wholesale monitoring activities. However, a number of government interventions into the wholesale market, such as publicly funding new generation or instructing existing government-owned generators to alter their bidding behaviour, are to some degree interventions predicated on achieving more equitable outcomes. High wholesale prices flow through to end consumers and can create equity issues in the retail market, so will have some influence over the ACCC’s monitoring of the wholesale market.
2.3.3 Networks

Market failure analysis recognises that in some circumstances, such as natural monopolies, competition is unlikely to deliver positive results. In these sectors, effective regulation is needed to push monopolies towards efficient outcomes. This analysis is central to the continued regulation of networks in the NEM, and will form the foundation of the ACCC’s monitoring of networks.

Legal aspects of our framework will help guide the more detailed monitoring of network outcomes. The effectiveness of existing regulation to constrain network costs to efficient levels, and the potential impact of regulatory changes, will be key monitoring activities in networks.

While distributional and equity issues are not likely to be central to network-specific monitoring activities by the ACCC, we will remain cognisant of the potential impact on consumers from sub-optimal provision of network services. As set out in the REPI, network costs were the largest contributor to consumer bills and escalated significantly in jurisdictions where regulatory regimes were not effective. Future spending on network infrastructure will need to be carefully considered to avoid unnecessary additional costs to consumers. Similarly, network failures can leave consumers without the essential service of electricity and may impose significant cost or even threaten well-being and lives.

2.3.4 Environmental schemes

Environmental schemes, such as feed-in tariffs (FiTs) and certificate schemes like the Renewable Energy Target (RET), create markets or incentives for particular technologies and thereby influence outcomes in related markets such as retail and wholesale electricity. Market failure analysis will guide the ACCC in understanding these interactions and the potential impacts of such schemes on market outcomes.

Legal aspects of our framework will also be core to our monitoring of environmental schemes. Most environmental schemes originate from broader policy goals for which the electricity sector is a constituent component, such as reducing greenhouse gases. The ACCC will undertake monitoring and analysis to determine the impact that they are having on electricity markets and prices, and whether improvements to the design of these schemes would reduce costs.

The final REPI report provided an example of the potential distributional effects of environmental schemes. FiT schemes were introduced to encourage the take-up of rooftop solar systems, and have likely been a major factor in assisting that industry to develop in Australia. However, most FiT schemes were designed so that FiT payments to solar houses are funded from the broader pool of electricity customers, which means non-solar houses are cross-subsidising solar houses. As the take-up of rooftop solar has grown, these cross-subsidies have too, raising concerns about the fairness of the schemes on consumers. While more recent FiT schemes have been designed to minimise this impact, the ACCC will continue to monitor the impact of environmental schemes to identify potential further issues.

2.4 Interaction with AER monitoring activities

The Terms of Reference for the ACCC’s monitoring inquiry require the ACCC to undertake monitoring activities and analysis that will overlap with existing monitoring activities in the NEM. As set out in this report, we intend to minimise the duplication of efforts across these activities, and will draw on relevant other monitoring work to incorporate into our own reporting.

Of particular relevance is the AER’s monitoring and reporting activities. As the economic regulator for the electricity sector, the AER undertakes a range of activities that will be broadly relevant to the ACCC’s inquiry, including:

- reporting on compliance and performance of the retail market
- monitoring of retailers’ hardship policies and ensuring compliance with legal requirements
- reporting on the performance of the wholesale market
- undertaking analyses of high price events in the wholesale market
- investigating and enforcing breaches of the National Energy Retail Law
- responsibility for network regulation in the NEM.

The ACCC and AER are both established under the CCA. In seeking to fulfil the requirements of our respective activities, we will share resources and expertise as far as the legislation allows. We will also seek to avoid duplication of effort and resources wherever possible. The work of the ACCC and the AER in terms of the energy markets will always seek to find the most efficient way to undertake our roles without compromising our respective ability to provide independent analysis and advice to government, and to administer energy market regulations.

These synergies and combined resources make both agencies collectively well placed to analyse and comment on the effectiveness of competition and efficiency of the energy sector.
3. Retail market and customer outcomes

This section primarily relates to the following Terms of Reference:

(i) electricity prices faced by customers in the NEM including both the level and spread of price offers, analysing how wholesale prices are influencing retail prices and whether any wholesale cost savings are being passed through to retail customers

(iii) the profits being made by electricity retailers and the factors that have contributed to those

(v) the effects of policy changes in the NEM, including those resulting from recommendations made by the ACCC in its REPI report of July 2018

and the overarching objective of the Terms of Reference to identify any failure by market participants (or the market as a whole) to deliver competitive and efficient electricity prices for customers.

Electricity is an essential service for modern day living and customers (individual consumers as well as small and large businesses) are largely unable to exit the market. Accordingly, customers (rightly) expect to be able to access an affordable and reliable supply of electricity. Indeed, access to an affordable and reliable supply is vital to the long-term economic sustainability and wellbeing of Australians.

In a well-functioning NEM, effective competition in the wholesale and retail markets together with effective regulation of monopoly transmission and distribution network services should result in efficient electricity prices and services for customers. However, the ACCC found in the REPI that competition in the retail market is not as effective as it could be and is not delivering these efficient outcomes and expected benefits to customers. For example, many customers are paying higher electricity prices than they otherwise would if the market was functioning well, including by remaining on high-priced offers despite cheaper offers being available. The ACCC identified some of the most significant causes of these outcomes as being:

- retailers’ practice of excessively high-priced ‘standing’ offers, which means that customers who do not actively seek out and switch to a ‘market’ offer are paying some of the highest prices and more than they should for electricity
- confusing advertising and marketing of offers by retailers, which makes it difficult for customers who do actively seek to switch to a ‘market’ offer to identify which are in fact the better deals
- retailers offering conditional discounts (such as discounts for paying on time), where the customer incurs a significant penalty and pays a much higher price if they do not meet the conditions, and this disproportionately affects those least able to afford it.

The ACCC made a number of recommendations in its REPI report aimed at addressing concerns about the functioning of the retail market, which were intended to reduce electricity prices and improve customer outcomes. We welcome the progress by governments in implementing a number of these recommendations as discussed in this section of the report and also outlined at Appendix C.

The remainder of this section is structured as follows:

- updates on the retail market (section 3.1)
- market and policy developments (section 3.2)
- intended framework for monitoring (section 3.3)
- summary of monitoring measures (section 3.4).
3.1 Updates on the retail market

This section provides some updates on the retail market and customer outcomes using publicly available information. In particular, this section presents certain data series for retail prices, retailer advertising practices and retailer profits with an additional period of data compared to when the ACCC finalised its REPI report in June 2018. As is discussed below, there does not appear to have been significant change in a number of market conditions in the six to nine months since we delivered our final REPI report.

3.1.1 Retail prices

The ACCC observed in the REPI that high prices and bills have placed enormous strain on household budgets and business viability over recent years. For example, based on data sourced from retailers, the ACCC found that there was an overall real increase of 35 per cent in the amounts charged by retailers on an annual dollars per customer basis over the period from 2007–08 to 2017–18. There was also a price increase of around 56 per cent in real terms over the same period.\(^\text{44}\)

Figure 3.1 below shows a similar trend to December 2018 using consumer price index (CPI) data from the ABS. This data confirms that retail prices for many small electricity customers in the NEM (households and most small businesses) have risen significantly in real terms in the last ten years.

Figure 3.1: Consumer price index electricity series (inflation adjusted) for Australian capital cities to December 2018

Most recently, between December 2017 and December 2018, retail prices fell in Brisbane and Hobart by 6.4 per cent and 1 per cent respectively. In contrast, retail prices in Sydney and Adelaide increased by 3.7 per cent and 5.2 per cent respectively over the same period, although these increases were tempered by a decrease between June 2018 and December 2018. Prices rose in Melbourne by 9.7 per cent over the 12 months to December 2018.

\(^{44}\) ACCC, Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final Report, June 2018, p. 5.
In this context, the ACCC strongly welcomes the moves by governments to progress reforms that are in line with the recommendations in our final REPI report that will bring down prices significantly for many consumers. These are discussed in section 3.2.

3.1.2 Advertised discounts and price dispersion

The ACCC found in the REPI that retailers’ advertising practices are confusing and that prices and bills have been increasing despite a steady rise in advertised discounts. This is due to the fact that retailers generally advertise discounts from their own standing offer rates, which vary between retailers and makes it difficult for customers to compare offers on a like-for-like basis to determine which one is a better deal for their circumstances. For example, an offer with a higher discount in some instances can also have higher underlying charges and end up being more expensive than an offer with a lower discount or even no discount. Additionally, because retailers often advertise discounts that are conditional and carry significant penalties if those conditions are not met, many customers in effect end up paying a much higher price.

Figure 3.2 below was published in the ACCC’s final REPI report and has been updated to include an additional year of data. The figure illustrates the steady rise in advertised discounts in Victoria as an example of the broader trend across the NEM. Notably, as at June 2017, the maximum conditional discounts available in Victoria were between 30 and 40 per cent. As at June 2018, the maximum conditional discounts available had increased with 14 per cent of the available ‘market’ offers advertised with conditional discounts in excess of 40 per cent.

Figure 3.2: Conditional ‘headline’ discounts for single rate residential market offers (Victoria) from June 2012 to June 2018

Figure 3.2 also shows that the proportion of available ‘market’ offers with conditional discounts of 30 per cent or less declined, while offers with conditional discounts of greater than 30 per cent grew from around 38 to 44 per cent of available offers.

The confusing advertising practices of retailers is illustrated in the following example relating to the Powercor distribution zone in Victoria. As noted in the ACCC’s final REPI report, in January 2018, the average annual bill for a customer on the offer with the highest advertised discount was around $86 more expensive than if the customer was on the cheapest offer.45 Figure 3.3 below provides comparative results for January 2019, while figure 3.4 further below presents the annual potential loss if a customer does not meet the conditions to achieve the discount.

Figure 3.3: Annual bill ($) for an offer with a given advertised discount in the Powercor distribution zone (Victoria) in January 2019

Source: Based on St Vincent de Paul Society Electricity Market offer data, January 2019. Note: Assumes a consumption level of 1200 kWh per quarter based on the AER’s annual average consumption figure of 4811 kWh for Victoria (see: AER, Annual report on compliance and performance of the retail energy market 2017–18, December 2018, p. 88).

Figure 3.3 shows that for offers with no discount attached there was a difference of $885 between the average annual bill for a customer on the most expensive offer ($2164) and the cheapest offer ($1279). More importantly, the offer with the highest advertised conditional discount of 43 per cent ($1460) was $181 more expensive than the cheapest offer with no discount.

Figure 3.4: Annual potential loss ($) for an offer with a given advertised discount in the Powercor distribution zone (Victoria) in January 2019

Source: Based on St Vincent de Paul Society Electricity Market offer data, January 2019. Note: Assumes a consumption level of 1200 kWh per quarter based on the AER’s annual average consumption figure of 4811 kWh for Victoria (see: AER, Annual report on compliance and performance of the retail energy market 2017–18, December 2018, p. 88).

Figure 3.4 presents the annual potential loss if a customer does not meet the conditions to achieve a discount (where they are conditional discounts), noting that in some cases the discounts apply to the entire bill while in other cases the discounts only apply to the usage component of the bill. The highest annual potential loss is for a ‘market’ offer with a 34 per cent discount off the entire bill. If the conditions are not met, the customer ends up paying an additional $859 per year, resulting in a total annual bill of $2528. This is $364 more per year than the most expensive offer with no discount. The second highest annual potential loss is for a ‘market’ offer with a 43 per cent discount off the usage component.
of the bill. If the conditions are not met, the customer in that instance ends up paying an additional $724 per year and a total annual bill of $2184. This is also more than the most expensive offer with no discount.

As discussed in section 3.2, the ACCC strongly welcomes moves by the Australian Government towards implementing several reforms in NSW, SA and South East Queensland that are in line with recommendations from our final REPI report related to retailer pricing and advertising. We consider these significant changes will help customers more easily compare offers and identify a better deal, and address what the ACCC found to be unreasonable penalties in the case of conditional discounting. We also note that the Victorian Government is implementing similar reforms.

### 3.1.3 Retailer profit margins

The ACCC found in the REPI that, on a NEM-wide basis, there was an upwards trend in profit margins (EBITDA)\(^\text{46}\) for the big three retailers (AGL, Origin Energy and EnergyAustralia) and they consistently had higher margins relative to their smaller rivals, with these costs being borne by customers in the form of higher prices and bills.\(^\text{47}\)

The following provides some observations about retailer costs and profit margins based on the most recent publicly available financial statements for AGL, Origin, EnergyAustralia, Momentum Energy, and Snowy Hydro. Many of these energy providers are vertically integrated and/or provide a mix of energy products (i.e. gas and electricity) and report on their costs and profit margins in a variety of ways in their financial statements. The publically reported data can be contrasted with the ACCC’s more detailed information obtained from retailers in the course of the REPI using compulsory information-gathering powers. This data enabled a better understanding of the results seen in the publicly-available financial statements. Accordingly, the following analysis should be read with an understanding that it is based solely on the public statements of the retailers and provides only a very high level indication of trends in costs and profit margins.

**AGL**

AGL publicly reports its financial results for various segments of its vertically-integrated business, including Wholesale Markets, Group Operations and Customer Markets (its retail arm).\(^\text{48}\) However, AGL does not separately report the results for its electricity business, with the results being presented on a combined basis for both gas and electricity.

Figure 3.5 below shows that AGL’s Customer Markets segment has seen a decline in EBIT in recent periods.\(^\text{49}\) AGL attributes this decline to the combination of a decreased margin in its consumer portfolio, lower volumes in its large business portfolio and higher operating costs as a result of increased competition and a higher number of customers switching to lower priced products.\(^\text{50}\)

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\(^{46}\) EBITDA measures may overstate the ‘true’ margin that a retailer obtains as it looks at returns before depreciation, amortisation, interest and tax are accounted for. To the extent that these are significant costs, the return will be lower. In addition, there are some limitations to an examination of EBITDA trends of retail businesses given that the big three and a number of the other retailers are vertically integrated. The EBITDA for a vertically integrated retailer is likely to be largely dependent on the price at which it buys wholesale electricity from its wholesale division.


\(^{48}\) The Wholesale Markets Business unit comprises Wholesale Electricity, Wholesale Gas and Eco Markets and controls the dispatch of AGL’s owned and contracted generation assets and associated portfolio of energy hedging products. The Wholesale Markets Business unit has been used a proxy for AGL’s wholesale electricity operations as wholesale gas and eco markets are relatively smaller contributors as compared to their wholesale electricity operations.

\(^{49}\) AGL, Annual Report 2018, pp. 28, 29 and 33.

\(^{50}\) This includes AGL reporting on its Customer Markets unit which is responsible for retailing of electricity, gas, solar and energy efficiency products and services to residential and business customers.
Figure 3.5: AGL Customer Markets EBIT from 2009–10 to 1H 2018–19, real $2017–18

Source: ACCC analysis of AGL public financial results.

The ACCC notes that the decline in EBIT for AGL’s Customer Markets segment appears to be most significantly due to a decline in its profit margin from gas operations and also increased operating costs more generally. That said, AGL did report that its consumer electricity gross margin fell to $452 million in 2017–18, from $485 million in 2016–17 (nominal terms, $494 million in real terms).\(^{51}\)

AGL also reported in its recent half year results that its gross margin had decreased further, falling by 12.3 per cent between 1H 2017–18 and 1H 2018–19.\(^ {52}\) This is in contrast to AGL’s overall profitability, which saw an increase in its profit after tax of more than 10 per cent from $487 million in 1H 2017–18 to $537 million in 1H 2018–19. Notably, AGL’s Wholesale Market segment continued to show strong results, as discussed in section 4.2.3.

**Origin Energy**

Origin does not publicly report on the profit breakdown from its generation and retail electricity assets. Rather, it reports collectively on its retail business (including gas, electricity and LPG customers), and generation business, along with its solar business through its Energy Markets division.\(^ {53}\)

While this makes it difficult to ascertain profit breakdown attributable to its retail and generation electricity, we note that an increase in electricity generation output, coupled with higher wholesale electricity prices and natural gas sales, contributed to Origin’s Energy Markets division’s EBITDA of $1.8 billion in 2017–18.\(^ {54}\) This represents a continuation of strong earnings by the division over the last five years as shown in figure 3.6 below.

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Origin released its half year results for 2018–19 on 21 February 2019. Growth in the Energy Markets division for 1H 2018–19 was 2 per cent, with an EBITDA of $852 million. Origin contended that this increase was mainly driven by the gas portfolio, underpinned by strong sales to business customers. Origin reported that the electricity portfolio was impacted by increasing levels of competition in the retail market, customer price relief initiatives and lower electricity usage per customer. Origin’s Energy Markets division experienced net customer account losses of 28 000 for 1H 2018–19. Origin stated that it expects retail competition, including price relief initiatives and lower customer usage, to have a continued negative impact on its profit in 2H 2018–19.

EnergyAustralia

EnergyAustralia reports its financial results on a calendar year basis as part of its parent company, CLP holdings. EnergyAustralia reports profits and expenses for various segments of its business, including Customer (retail), Energy (wholesale) and Enterprise (corporate). Customer can be used as proxy for EnergyAustralia’s profit from its retail operations, which we note is not limited to electricity.

Energy Australia released its 2018 calendar year results on 25 February 2019, which showed a decrease in profit for its Customer segment to $264 million in 2018, from $500 million in 2017 (nominal terms, $510 million in real terms) as presented in figure 3.7 below.
Similar to other retailers, EnergyAustralia noted that competition in the retail market was placing pressure on margins and there had also been increased market activity resulting in a loss of 66,000 electricity customer accounts. EnergyAustralia noted that it expects competition in the retail market to remain intense in future.

**Momentum Energy**

Momentum Energy is Hydro Tasmania’s retail business, which provides a mix of energy products across Victoria, NSW, SA and Queensland. Momentum Energy does not separately report the results for its electricity business, with the results being presented on a combined basis for both gas and electricity.

Figure 3.8 below shows that Momentum Energy has been profitable over the course of the last five years, with a peak in profits in 2014-15 and 2015-16 but a decline over the last two periods.

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Hydro Tasmania attributed the decline in profit for Momentum Energy in 2017–18 to increased competition among retailers and customer churn. Hydro Tasmania also noted increased scrutiny arising from the ACCC’s REPI report, the Victorian Thwaites Review as well as from the Prime Minister’s summit with eight major electricity retailers.  

**Snowy Hydro**

Snowy Hydro presents its annual reports for the consolidated group consisting of Snowy Hydro Limited and its controlled entities (including retailers Red Energy and Lumo Energy). Snowy Hydro does not distinguish between generator and retail profits in its annual reports.

As shown in figure 3.9 below, Snowy Hydro reported total profit before interest and tax of $299 million in 2017–18, down from $445 million in 2016–17 (nominal terms, $453 million in real terms). It noted that, in contrast to the strong profit figures in 2016–17, profit decline in 2017–18 was attributable to lower than forecasted peak demand, unusually high coal-fired plant availability, a decrease in its generation volumes, and generally unfavourable market conditions throughout the year.

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Specific to its retail operations, Red Energy and Lumo Energy, Snowy Hydro commented that, despite the competitive environment, its retail business grew by 2 per cent to 1.06 million customers. Similar to Origin and AGL, Snowy Hydro also commented that it expected retail competition to continue to intensify.\footnote{Snowy Hydro Limited and its Controlled Entities, Annual report 2018, p. 11.}

On 29 June 2018, the Australian Government completed the acquisition of the Snowy Hydro shares previously owned by the NSW and Victorian governments. Following this change in ownership, the entity continues to operate as a Corporations Law company with an independent Board of Directors.\footnote{Snowy Hydro Limited and its Controlled Entities, Annual report 2018, pp. 3–4.}

## 3.2 Market and policy developments relating to the retail market

The ACCC made a number of recommendations in its REPI report aimed at improving outcomes for customers. The following sections set out some of the responses from the energy companies and policy developments since the ACCC concluded the REPI. A full list of REPI recommendations and their progress is at Appendix C.

### 3.2.1 Reduction in retail prices from 1 January 2019

In November 2018, the Minister for Energy, the Hon. Angus Taylor MP, met with senior executives of major energy companies to discuss the Australian Government’s intent on a range of energy matters. It was reported that the government requested the energy companies to lower the cost of their standing offers by 1 January 2019.

Following this meeting, a number of energy companies made announcements about their prices and standing offers:

- On 16 November 2018, AGL announced discounts to standing offer customers who stay on an offer for over a year. The discount amounts vary by state\footnote{VIC–10% off supply and usage charges, NSW–10% off the usage component, South East Queensland–5% off the usage component, SA–7% off the usage component.}, and will mean that over 150,000 consumers will receive an annual saving of $50–$180 (assuming an average annual usage of 4.4 MWh on a peak only tariff). Further, 27,000 small business customers will save an average of $120–$340 annually (assuming an average annual usage of 8.8 MWh on a peak only tariff).\footnote{AGL, AGL announces safety net for electricity customers, Media Release, 16 November 2018, viewed 7 March 2019, https://www.agl.com.au/about-agl/media-centre/asx-and-media-releases/2018/november/agl-announces-safety-net-for-electricity-customers.}


- On 30 November 2018, EnergyAustralia announced it will hold electricity prices flat for Victorian households in 2019 by absorbing more than $15 million worth of increases in supply-chain and other
costs. EnergyAustralia says this announcement means Victorian consumers avoid a 1.9 per cent increase for 2019 which would have occurred otherwise.68

- On 30 November 2018, Origin announced concession card holders on standing offers or non-discounted plans will get an automatic 10 per cent discount on usage charges from 1 January 2019. The discount will be for NSW, ACT, Queensland and SA customers and will offer 230,000 concession card customers an average saving of $169 off standing offer rates annually, based on the weighted average impact for residential customers across all network areas and tariffs.69

- On 30 November 2018, Snowy Hydro’s retailers Red Energy and Lumo Energy announced they will offer all of their standing offer customers an automatic and unconditional discount of 10 per cent as of 1 January 2019.70

While these announcements are a positive first step in reducing the level of high-priced ‘standing’ offers, the ACCC remains concerned with retailers continuing to use discounts off uncertain bases in order to effect a change in price rather than simply reducing the underlying tariff. As previously noted, the ACCC is very concerned that this practice leads to confusion for customers about what represents a better deal. The ACCC considers that fundamental and structural reform of the way retailers advertise offers is required and so we emphasise the importance of implementing the default market offer and reference bill amount (discussed below).

### 3.2.2 Default market offer and reference bill

In its REPI report, the ACCC recommended the implementation of a DMO as a way to reduce the costs for customers on ‘standing’ offers. The ACCC also recommended the implementation of a reference bill amount or common baseline against which retailers must calculate their advertised discounts so as to improve the ability of customers to navigate the market and identify what represents a better deal.

On 22 October 2018, the Treasurer and the Minister for Energy requested that the AER commence work on setting a DMO in each NEM region where prices are not regulated for residential and small business customers.71 The Treasurer and the Minister for Energy also requested the AER to develop a mechanism for determining reference bill amounts from which headline discounts can be calculated. This work picks up REPI recommendations 30, 32, 33, 49 and 50.

The Australian Government subsequently advised the AER that it is not currently necessary for it to undertake work to determine default market offer prices for Victoria as the Victorian Government is moving to introduce its own regulated default offer, as discussed further below.

### Australian Government reforms for NSW, SA and South East Queensland

On 22 February 2019, the Australian Government released for consultation a draft mandatory code under Part IVB of the CCA to implement the DMO (the draft Code). The AER will be responsible for determining the DMO price that will apply under the draft Code for residential and small business customers in NSW, SA and South East Queensland and the ACCC will be responsible for enforcing the provisions.72 Under the draft Code, the ACCC could seek civil penalties from electricity retailers for

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breaching the provisions against: breaching the price cap of the default offer and not advertising offers in accordance with the requirements of the Code.

On the same day, the AER released for consultation its draft DMO price determination, which will also be used to establish a reference bill amount. The AER noted that ‘the key policy objective of the DMO price is to mitigate the impact of unjustifiably high prices for standing offer customers while allowing scope for continued competition in market offers’. The AER further noted that:

…we have sought to set DMO prices at a level that provides consumers and retailers with incentives to participate in the market, while allowing retailers to recover their efficient costs in servicing customers. The ACCC stated the default offer should not exist to be the lowest price, or close to the lowest price in the market. Its purpose is to act as a fall-back position for those not engaged in the market or for those that require its additional protections. We consider that these factors are important in facilitating competition, efficient investment, and innovation in retail markets.

The AER’s pricing approach is a ‘top down’ method using observed pricing data from generally-available offers as of October 2018, a method which the ACCC strongly supports to achieve the above objectives. Specifically, the AER’s draft determination is that the DMO price for each distribution zone will be set at the mid-point (50th percentile) of the range between the median market offer and median standing offer, based on generally-available offers in October 2018. The AER notes that the DMO price would save average residential customers on standing offers between $115 and $218 a year and small business customers between $453 and $937 a year (depending on the type of tariff).

A final determination on a DMO price and reference bill is required by 30 April 2019, for implementation by 1 July 2019.

The ACCC strongly welcomes the progress on implementing these recommendations by the Australian Government.

The implementation of a default offer to be used as a reference amount is crucial to bringing down prices significantly for over half a million customers who are on standing offers and helping all other customers to identify a better deal.

**Victorian Government reforms**

On 26 October 2018, the Victorian Government announced its policy for a new Victorian Default Offer (VDO) that will replace current standing offer prices by 1 July 2019. The VDO is intended to apply in Victoria rather than the DMO price discussed above. On 20 February 2019, the Victorian Government introduced into state parliament a Bill, The Energy Legislation Amendment (Victorian Default Offer) Bill 2019, to empower the Essential Services Commission of Victoria (ESC Vic) to determine the VDO price for each distribution region of Victoria, with energy retailers required by law to offer customers the VDO price if they request it.

On 8 March 2019, the ESC Vic released its draft advice to the Victorian Government on the VDO price. The ESC Vic noted that ‘the purpose of the VDO is to provide customers with universal access to a ‘fair’ price’. The ESC Vic further noted that:

*While the VDO is described in terms of ‘fairness’, the DMO is described as a ‘fall-back position’ or a cap ... to limit the ‘loyalty tax’ ... These terms suggest the DMO is not intended to be as profound an intervention as the VDO.*

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79 ESC Vic, Draft advice—Victorian Default Offer to apply from 1 July 2019, 8 March 2019, p. iii.

80 ESC Vic, Draft advice—Victorian Default Offer to apply from 1 July 2019, 8 March 2019, p. iv.
The ESC Vic’s pricing approach is a cost-based method, where the VDO price is intended to reflect the efficient costs of running a retail business, a ‘modest allowance for customer acquisition and retention costs’, and a maximum retail margin. The ESC Vic notes that the VDO is not intended to make an allowance for headroom. The ESC Vic estimates that the VDO price would save typical residential customers (using 4000 kWh per year) on ‘standing’ offers between $390 and $520 per year and small businesses (using 20 000 kWh per year) between $1830 and $2300 per year, all depending on where they are located.

The Victorian Government has also committed to reforms for improving the comparability of marketing information on prices by retailers.

### 3.2.3 Conditional discounts

The draft Code discussed above also prevents retailers from advertising a discount as the ‘headline’ discount if it is conditional on, for example, the customer paying on time. While retailers will still be able to advertise conditional discounts (so long as it is not the ‘headline’ discount), the draft Code also requires retailers to clearly and prominently advertise the terms of any such conditions.

On 18 February 2019, the Australian Government submitted a rule change request to the AEMC to change the National Energy Retail Rules (NERR), and make any requisite changes to the National Electricity Rules (NER) and the National Gas Rules (NGR) the AEMC considers necessary to reduce inflated conditional discounts.

The proposed rule change would ensure conditional discounts for both gas and electricity retail offers are no higher than the reasonable cost savings that a retailer expects it will make if a consumer satisfies the conditions attached to the discount. The proposal is in line with REPI recommendation 33. In terms of implementation, the government recommends that the rule requires the AER to publish a guideline on what constitutes reasonable conditional discounts within a ‘market’ offer.

The ACCC strongly welcomes this progress. We recognised in the REPI a significant problem with retailers advertising high discount offers, with part of such discounts being conditional on paying on time. The ACCC found that, on average, one in four customers on conditional discounts failed to meet the conditions and ended up being unreasonably penalised with excessive costs. These discounts can amount to more than $1000 annually for some consumers. The conditional nature of these discounts makes it confusing for consumers to compare offers and if they do not end up being able to pay on time, for whatever reason, they are subject to what amounts to significant late payment penalties.

Limiting these conditional discounts to the reasonable savings to the retailer will make retailer offers more comparable and fairer, and prevent consumers being subject to significant late payment penalties which are not related to the savings to retailers of consumers paying on time.

### 3.2.4 Consumer Data Right

On 26 November 2017, the Australian Government announced the introduction of a Consumer Data Right (CDR) in Australia, with the ACCC as the lead regulator. The CDR is essentially a data portability right, which will give customers and their authorised representatives access to consumption data or certain other individual product and customer data. This in turn will make it easier for customers to...
compare and switch between products and services given their specific circumstances. It will also encourage competition between service providers, leading not only to better prices for customers but also more innovative products and services.

The CDR is intended to be an economy-wide right, which will be rolled out sector-by-sector across the economy. The government has determined that the CDR will first apply to the banking sector, under a framework that will be known as ‘Open Banking’. The CDR is due to commence rolling out in banking from July 2019. The energy and telecommunications sectors are proposed to follow. This aligns with REPI recommendation 31, which was that the application of the CDR to the electricity sector should be pursued as a priority under the CDR framework.

On 25 February 2019, the ACCC published a Discussion Paper to begin consultation on the best model to apply the CDR in the energy sector. The Discussion Paper sets out three options for accessing consumer energy data, and information on principles the ACCC will take into account when considering which access model is most appropriate. The paper notes that the ACCC is working towards implementing the CDR in the energy sector during the first half of 2020 for priority data sets in the NEM. Submissions to this Discussion Paper are due by 22 March 2019.

We consider that competition in the electricity sector would be further enhanced by REPI recommendation 35, which was for consumers to be able to provide their consent for third-party intermediaries to deal with retailers and facilitate a switch on their behalf. This would allow consumers to be able to more easily switch between retailers and offers. Implementation of this recommendation would require amendments to the consent requirements in national energy legislation.

3.2.5 Energy Charter

The Energy Charter, officially launched on 31 January 2019, is a voluntary industry-led initiative that describes its purpose as to ‘progress the culture and solutions required to deliver a more affordable, sustainable and reliable energy system for all Australians’. Businesses that sign up to the Charter are required to report and publicly disclose how they are performing against the five principles of the Charter. These five principles are: improving culture to put the customer first; improving energy affordability; improving sustainability; improving the customer experience; and providing more support for vulnerable customers.

Chief executives of the participating companies are responsible for making sure their businesses adhere to the Charter principles, while an independent accountability panel, chaired by Climate Change Authority chair Wendy Craik, will scrutinise and report on the results of the businesses.

The participating companies are required to lodge their first report on how they have adhered to the Charter’s principles over the first half of 2019 by 30 September 2019, with disclosures needing to be signed off by the respective chief executives, similar to the process for annual reports. The independent accountability panel will examine the disclosures and publish a final report by 30 November 2019.


The principles of the Charter, such as the commitment to improve energy affordability, align with the overarching objectives of the recommendations made by the ACCC in its REPI report and the ACCC is encouraged by the energy business signing up to the Charter. Nevertheless, the ACCC will be interested to observe the extent to which the retailers abide by the spirit of the Charter in practice.

88 ACCC, Consumer Data Right in Energy—Consultation paper: data access models for energy data, February 2019, p. 11.
89 ACCC, Consumer Data Right in Energy—Consultation paper: data access models for energy data, February 2019, p. 7.
3.2.6 Prohibiting Energy Market Misconduct amendments

On 5 December 2018, the Australian Government introduced into parliament the *Treasury Laws Amendment (Prohibiting Energy Market Misconduct) Bill 2018*. The Bill would amend the CCA to prohibit certain conduct in electricity retail, contract and wholesale markets. It provides remedies which the ACCC and Treasurer may use if there is a reasonable belief that a corporation has engaged, or is engaging, in prohibited conduct in the electricity sector.

The Bill sets out three kinds of prohibited conduct including prohibited conduct in relation to retail prices. A corporation contravenes this prohibition if it offers to supply electricity, or supplies electricity, to ‘small customers’ (residential or small business consumers) and fails to make reasonable adjustments to the price of those offers, or to the price of those supplies, to reflect sustained and substantial reductions in its underlying cost of procuring electricity.92

The Explanatory Memorandum to the Bill notes that over time various factors, such as increased electricity generation capacity or more effective competition, could result in sustained decreases in supply chain costs for retailers.93 As such, the prohibition in relation to retail prices is designed to ensure consumers see the benefit of supply chain cost savings, and that such savings are not retained by retailers to the detriment of their consumers.

If the ACCC has a reasonable belief that a corporation has engaged, or is engaging, in prohibited conduct in relation to retail prices, it has a range of remedies available to it, including: issuing a public warning notice, issuing an infringement notice, applying to the court for an injunction, or seeking a pecuniary penalty from the court. Unlike the other two prohibited conduct provisions, the ACCC cannot make a recommendation to the Treasurer to make a contracting order, or apply to the court for a divesture order.

The remedies contained in the Bill are designed to complement our inquiry by allowing the ACCC to respond to misconduct we identify as part of our inquiry. The remedies and other measures in the Bill are intended to complement the existing provisions of the CCA and the National Electricity Law. On 6 December 2018, the Senate referred the provisions of the Bill to the Senate Economics Legislation Committee for inquiry and requested a report by 18 March 2019.94

The current status of the Bill is uncertain with the Australian Government indicating an intention to take the policy to the upcoming federal election.95

3.3 Intended framework for monitoring the retail market and customer outcomes

The retail market is the interface between the providers of electricity and most end-customers.96 Retailers purchase wholesale electricity via the spot market and by contracting, and make offers to customers for the provision of electricity (see section 4.4 for more detail on the technical functioning of the NEM).

Competition was introduced into the retail market as part of a program of economic reforms following the 1993 report of the *Independent Committee of Inquiry into a National Competition Policy* (the Hilmer Inquiry).97 A key principle underpinning the reforms was that competition can benefit consumers and

92 *Treasury Laws Amendment (Prohibiting Energy Market Misconduct) Bill 2018*, s. 153E.
96 An exception is very large business customers who are able to negotiate their supply directly with electricity generators.
the wider community by delivering efficient prices, improved customer service and innovation in products and services.

Competition is an iterative process between market participants. In a competitive market, retailers are expected to strive to deliver services at least cost and continuously seek product and process improvements to meet customer demands. In turn, well informed customers comparing and selecting the most cost-effective offers that best meet their needs are expected to enhance the rivalry between retailers as they strive to retain existing customers and win new customers.

Importantly, it is the level and effectiveness of competition in a market that determines the extent to which these efficient outcomes and intended benefits are delivered. The retail market may display some characteristics of competition, such as a number of retailers operating in each NEM region and a variety of available price and service offers for customers to choose from. However, the ACCC in the REPI identified a number of barriers to effective competition and market participation. If such barriers remain then competition is unlikely to realise the full efficiency benefits envisaged by Hilmer, and customers will not benefit from lower prices and a variety of high quality services that effective competition can deliver. For example, if customers are unable to access clear, meaningful and comprehensible information or there are otherwise barriers to switching between retailers (i.e. financial and non-financial costs) then they will be constrained in their ability to participate in the market. In this instance, higher prices and/or lower levels of service will likely result.

Given the above dynamics, we intend to monitor behavioural and performance-based characteristics of the retail market using a range of quantitative and qualitative measures in order to make an assessment of the level and effectiveness of competition and outcomes for customers. At a high level, this means that we expect to collect information on:

- retail market structure
- retailer advertising practices
- level and spread of retail prices
- underlying costs of a customer’s bill, including retailer costs and profits
- retail product and service differentiation and innovation
- customer awareness, understanding and participation in the market.

Whilst not intended to be an exhaustive list, the remainder of this section provides further detail on some of the key issues relevant to the above that we expect to monitor, taking into account specific issues identified by the ACCC in the REPI and submissions to our Discussion Paper on the analytical framework to apply. It should be noted that many of these issues are interrelated and, therefore, will not necessarily be monitored as stand-alone measures or in the order in which they appear here.

### 3.3.1 Retail market structure

Market structure is an important contributing factor to the level and effectiveness of competition in a market, and therefore the outcomes in relation to retail prices, costs and profits are discussed in the remainder of this section.

Factors that may hinder the level and effectiveness of competition in a market include:

- a small number of firms having a large market share, where this enables those firms to exercise market power and thereby reduces incentives to compete
- vertical integration, where this enables firms to foreclose access by their competitors to critical markets in the supply chain
- other features of the market that result in barriers to competition, entry and expansion.

The ACCC found in the REPI that the retail market had trended towards a concentrated and vertically integrated market. The ACCC observed that this was primarily the result of the way in which the customer bases of the previously publicly-owned electricity providers had been sold to the private operators. In particular, the customer bases were largely acquired by AGL, Origin and EnergyAustralia, which continue to hold by far the largest market shares today. The ACCC observed that the customer
bases that these 'big three' retailers purchased included many inactive customers that rarely (if ever) change retailers or deals and this has given them a stable and valuable revenue stream that has not been readily available to smaller retailers or new entrants.  

**Submissions**

Vocus Group submitted that the ACCC should closely monitor ‘gentailers’ as they can design retail pricing structures that take advantage of their vertically integrated structure. Vocus Group also suggested that the ACCC monitor the impact of the DMO price on competition and the ability for smaller retailers to innovate and compete with the Tier 1 retailers.

ERM Power submitted that the ACCC should focus on the areas of greatest concern highlighted in the REPI, which include the level of competition in the market with vertically integrated retailers holding substantial portfolios of generation and customers, and market structure and power. ERM Power submitted that monitoring should include a forensic review of transfer pricing between generators and their retail arm to ensure profitability of vertically integrated businesses can be adequately examined and assessed against the long-term benefits of consumers.

Alinta Energy submitted its support for the ACCC taking a broad approach to examining barriers to entry and the effect these have on competition. Alinta Energy recommended that the ACCC give substantial consideration to the issue of regulatory barriers and increasing government intervention. Alinta Energy noted that the seemingly low number of new entrants in the NEM of late should not necessarily be interpreted as some form of market deficiency as the political uncertainties would also be having an impact.

Meridian Energy suggested that a specific measure the ACCC could include is customer movement from large incumbent retailers to small retailers and the period the customer is then retained.

A number of submissions also highlighted the need to monitor embedded networks. For example, CALC suggested that the ACCC gather information and monitor: the costs and margins charged by third-party agents who manage billing in embedded networks and for whom facilitating the sale of energy is a core business; the payment difficulty assistance offered by these businesses; the cost of electricity for embedded network households in comparison to other households; new business models emerging that avoid regulation; and the costs or practicalities of leaving embedded networks.

Similarly, PIAC suggested that the ACCC look to improve information on: the number of embedded networks and exempt sellers in operation; the number of consumers currently covered by embedded networks and/or exempt seller arrangements; the costs and margins charged in exempt selling and/or embedded network arrangements; the costs, both to customers and network owners, of exiting embedded network arrangements; and the effectiveness of payment supports or retail assistance measures available to consumers in embedded network and/or exempt selling arrangements.

**Conclusion**

For the reasons already identified, the ACCC considers that monitoring the retail market structure will be an important part of our ongoing analysis. Indeed, many of the submissions also recognised that market structure has a significant influence on customer outcomes. Meridian Energy suggested looking at measures of customer movement, which we consider to form part of market share analysis and agree is a relevant indicator as outlined below as well as in relation to customer engagement (discussed later). In relation to embedded networks raised in a couple of the submissions, this may be an issue which we examine over the course of the inquiry as particular issues emerge, but are unlikely to undertake regular reporting on.

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Given the above, we consider that monitoring trends in the following indicators will provide a useful starting point for our ongoing analysis:

- number of retailers
- market share of retailers
- number of retailers that are vertically integrated and the extent of vertical integration
- length of tenure of customers for the big retailers versus the small retailers
- observations about concentration in the retail market, barriers to competition, entry and expansion, and emerging issues based on publicly-available reports (such as reports by the AER and AEMC) and comments or surveys from market participants (such as retailers or customers).

Where relevant and appropriate, we intend to report on these kinds of indicators not only from a NEM-wide perspective but also for each NEM region and in relation to particular customer segments, such as residential, small business and large business customers. We consider this will assist to inform our analysis of outcomes for particular customers in the NEM.

We note that much of this data is collected and published by the AER\(^{103}\) and ESC Vic\(^{104}\), or is otherwise publicly available, and we intend to rely on that information for the purposes of our monitoring work as far as possible. The exception is in relation to the length of tenure of customers, which we will need to source from retailers.

### 3.3.2 Retailer advertising practices

The approach taken by retailers in their advertising and presentation of offers can have a significant impact on how customers understand and engage with the market, which in turn influences the level and effectiveness of competition and outcomes for customers.

In order to facilitate high levels of participation, customers need to not only be able to access key information (such as usage charges), but also comprehend, assess and act on this information. Where customers encounter complexity in the information they receive, they may revert to biases and rely on heuristics (or mental shortcuts) rather than engage in more burdensome rational decision-making processes. Indeed, research has found that because electricity is an essential and homogenous service, poor quality of information may result in ‘learned helplessness’, whereby customers consider their efforts to understand energy markets to be a waste of time and instead disengage from market participation altogether.\(^{105}\)

The ACCC found in the REPI that customers face a range of challenges when choosing a retailer and offer that best meets their needs, largely due to the advertising and marketing strategies of retailers. In particular, the common practice of retailers advertising offers with ‘headline’ discounts causes undue confusion for consumers who do seek to engage with the market. This is because the discounts are based on underlying prices that vary across retailers and apply to different parts of a bill, making it difficult for customers to easily compare offers and determine which one will provide them with the best value for money. The ACCC was of the view that these advertising practices were a deliberate tactic used by retailers to give the impression that an offer was significantly cheaper than other offers in the market when this was not necessarily the case.\(^{106}\)

Further, the ACCC observed that discounts offered by retailers were frequently conditional, most commonly on the customer paying their bill on time. For these customers, the impact of not meeting the conditions to achieve the discount was similar to being charged a significant penalty that appeared not to be linked to the savings the retailer would make when the customer pays on time. The ACCC was of the view that these conditional discounts were likely to be disproportionately unfair to those facing

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\(^{105}\) Fletcher, A., ‘Role of Demand-Side Remedies in Driving Effective Competition: A Review for Which?’, Centre for Competition Policy—University of East Anglia, 7 November 2016.

payment difficulties, with those customers who can least afford it ending up with the highest overall bills. ¹⁰⁷

For these reasons, the ACCC made a number of recommendations in its REPI report that were intended to improve the ability for customers to engage with the retail market. As set out in sections 3.2, we welcome the moves by governments in implementing reforms in line with:

- recommendations 32 and 50, which relate to the establishment of a reference price that is to be used by retailers when advertising discounts
- recommendation 33, which relates to conditional discounts being no higher than the reasonable saving a retailer expects that it will make if a customer satisfies the conditions for the attached discount.

Submissions

ERM Power submitted that the ACCC’s monitoring should focus on the areas of greatest concern highlighted in the REPI, which include the marketing practices of retailers that dissuade small customers from engaging in the competitive market as this has led to poor customer outcomes and the entrenchment of the large gentailers’ incumbent base. ¹⁰⁸

CALC and VC OSS recommended that the ACCC monitor the size and prevalence of discounting and the outcomes for customers on discounts in comparison to the optimal market offer for their household. ¹⁰⁹

The NFF also recommended that the ACCC monitor the introduction of regulations around marketing, reference prices and discounting practices in the National Energy Customer Framework (NECF) and Victorian laws and regulations, and their impact on different cohorts of customers. The NFF noted that offers with a large headline ‘discount’ could be more expensive than one with a lower discount, and so the ACCC should gather data on the breakdown of market offers against the proportion of customers on those offers. ¹¹⁰

Origin noted that the establishment of a reference price to serve as a common basis for discounting is expected to lessen the confusion in the market, and that work by the AER (including updating the Retail Pricing Information Guidelines) will facilitate marketing in dollar terms and easier comparison of retail offers. ¹¹¹

The Australian Small Business and Family Enterprise Ombudsman submitted that the monitoring framework must capture not only prices but how they are conveyed, and that the framework needs to include a distinct category to allow the ACCC to identify participants’ behaviours to small and family businesses. ¹¹²

EnergyAustralia observed that retailer practices around discounting, price freezes, as well as more sophisticated pricing offers, may also provide some indication around competition and should be monitored alongside policy changes to implement simplified price offerings. ¹¹³

¹¹⁰ National Farmers’ Federation, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 3.
Meridian Energy submitted that the ACCC should collect additional data on the number and type of market offers that retailers market within the NEM so as to inform analysis of retailer pricing behaviour and how confusing the market can be for customers.\footnote{Meridian Energy, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 2.}

**Conclusion**

For the reasons already identified, confusing advertising and marketing of offers by retailers is one of the areas of concern that the ACCC considers needs to be addressed as a priority in order to improve the effectiveness of competition and the outcomes for customers. This was also highlighted in a number of the submissions, which were generally very supportive of the ACCC monitoring not only the level and spread of offers in the market (which are discussed next), but also how these messages are conveyed.

As noted in section 3.2, reforms to: prevent retailers advertising conditional discounts as their ‘headline’ discount; require conditional discounts to be cost-reflective; and require retailers to advertise ‘headline’ discounts with respect to a standardised reference bill amount are progressing. Under the draft Code, the ACCC will have the role of enforcing the requirements and will also be regularly monitoring compliance and the effect of the new policies on retailer offers and practices. We will undertake this role alongside our general enforcement role under the Australian Consumer Law, which prohibits misleading and deceptive conduct.

However, the ACCC notes that retailers need not wait until there is a legislative requirement or standardised reference bill amount in place in order to amend their advertising practices. We consider that retailers can and should immediately take steps to cease advertising conditional discounts as their ‘headline’ discounts, ensure that the terms of any conditional discounts that continue to apply are clear and transparent, and that any penalties that apply to customers when conditions are not met reflect only reasonable costs to the retailer.

Given the above, alongside our enforcement role under the draft Code and the Australian Consumer Law, our main aim will be to analyse a number of indicators in each report to get an understanding of how retailers are advertising their offers and the impact this has on the market and customer outcomes. We consider the following indicators will provide a useful starting point for our ongoing analysis:

- number or proportion of ‘standing’ offers and ‘market’ offers
- number or proportion of ‘market’ offers with no discounts attached
- number or proportion of ‘market’ offers with unconditional discounts
  - type of unconditional discounts offered and level of discounts applied
- number or proportion of ‘market’ offers with conditional discounts
  - type of conditional discounts offered, the level of discounts available and the effect if conditions are not met
- number or proportion of customers on the various types of ‘market’ offers
  - for conditional offers, the number or proportion of customers that achieved the available discounts
- observations about the advertising practices of retailers, particularly in relation to advertised ‘headline’ discounts and other related issues based on publicly available information (including, for example, reports by the AER and AEMC).

We note that the advertising practices of retailers may change over time in response to the reforms mentioned above or other factors. If so, we will reassess our indicators and adjust our monitoring accordingly.

We intend to monitor and report on these indicators from a NEM-wide perspective as well as in each NEM region or distribution zone and in relation to various customer segments, such as residential and small business. As part of our analysis, we will also look at the impacts on vulnerable customers, such as those on concessions or hardship plans. We consider this will assist to inform our analysis of outcomes for particular customer types in the NEM.
We recognise that much of this data is collected and published by the AER\textsuperscript{115} and the Department of Environment, Land, Water and Planning (Victoria)\textsuperscript{116}, or is otherwise publicly available, and we intend to rely on that information for the purposes of our monitoring work as far as possible. The exception is in relation to the number or proportion of customers on particular ‘market offers’ and whether those customers have or do not have conditional discounts, which we will need to obtain from retailers.

3.3.3 Level and spread of retail prices

It is an obvious point, but the level and spread of offers available in the NEM has a direct impact upon the outcomes for customers as the offers that retailers decide to make available determine what customers can select. In this section, the available offers as well as the structure of charges are discussed. Section 3.3.4 considers the underlying costs that make up a customer’s total bill amount, and how that influences the prices paid by customers.

The level and spread of offers

In an effectively competitive market, it is expected that there would be some level of price dispersion as retailers develop a range of price and service offers to best meet the needs of different customers. However, persistently high levels of price dispersion may also reflect inefficient price discrimination by retailers between customers who regularly search for, and can easily identify, better offers to meet their needs and customers who, for whatever reason, do not actively participate in the market.

Indeed, the ACCC found in the REPI that there is a significant amount of price dispersion in each NEM region where retail prices are no longer regulated. The ACCC also found that this price dispersion is less likely due to efficient price discrimination and more likely due to retailers taking advantage of customers being inactive or disengaged in the market and/or being confused about which offer constitutes a better deal as a result of retailers’ own pricing and discounting practices as discussed above.

As set out in section 3.2, we welcome the moves by governments to adopt reforms in line with a number of our REPI recommendations, including recommendations 30 and 49, which were aimed at bringing down the level of high-priced ‘standing’ offers, and ensuring that ‘market’ offers are able to be more readily understood by customers.

Structure of charges

The structure of charges can also have a significant impact on the pricing outcomes for customers. Retail price offers often comprise both a fixed daily supply charge and a variable usage charge. This means that customers pay the fixed charges regardless of how much electricity they actually consume, which limits their ability to effectively manage their electricity costs and reduce their bills. Such a structure may be efficient where it reflects the underlying costs involved in providing the service. However, in an effectively competitive market, there would likely be a range of price offers with different kinds of structure of charges that enable customers to decide the level of risk they are exposed to.

The ACCC found in the REPI that the vast majority of customers are on standard tariffs, which comprise both fixed and variable charges. One of the issues raised by customers in the course of the REPI was that their attempts to reduce their bills (i.e. by reducing consumption) had limited effect on their bills because there had been an increase in fixed charges imposed by retailers. The ACCC observed, however, that there was a potential for negative bill shock for customers in any transition to cost-reflective network tariffs.

In its REPI report, the ACCC made a recommendation (recommendation 14) for the take-up of cost-reflective network pricing, while recognising that retailers should not be obligated to reflect the cost-reflective network tariff structure in their customers’ retail tariffs, but should be free to innovate in the packaging of the network tariff as part of their retail offer.


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Submissions

The Department of State Growth (Tasmania) supported the comparison of unit rates rather than total bills, noting that jurisdictions such as Tasmania have a high consumption and therefore comparison of total bills with other jurisdictions can give a misleading impression of higher unit rates when this is not the case.117

Vocus Group submitted that the ACCC should monitor the impact on the market of the DMO, including its impact on price competition and the ability for smaller retailers to innovate and compete with Tier 1 retailers.118

Beovista submitted that all of the retail price data outlined in REPI is valuable and should be replicated going forward, including for both residential and business customers. Beovista recommended that the ACCC seek to obtain actual bill data (anonymised) rather than simply using the ‘average standing/market offer’ pricing. Beovista suggested that a representative, scalable, set of sample residential and business customers’ electricity bills could be used, which can then be grouped by consumption and region to enable electricity bill values to be compared across retailers.119 Beovista also noted that the reference bill could be used to review pricing offers in the market.120

CALC stated that retailers hold a lot of data on what consumers are actually paying, and that this should be available for analysis by regulators and consumers. CALC noted that the priority in essential services markets should not be simply maximising profits, that the supply of energy has a social purpose, and as such the ACCC should focus on gathering and reporting information that improves market outcomes and market participant behaviour, particularly in relation to vulnerable or disadvantaged households.121

The NFF suggested that a breakdown of retail prices by energy networks themselves could be a useful way to examine competition where high spread indicates healthy competition and low spread otherwise, which the Agriculture Industries Energy Taskforce also supported.122 Additionally, the NFF noted that the breakdown of market discount offers against the proportion of people on those offers provides a useful indicator for both consumer and retailer behaviour.123

Business SA submitted that the ACCC should monitor price outcomes for large market customers to ensure that there are no unintended consequences from the Australian Government setting default prices in the small customer market, such as retailers simply passing on additional costs to the large customer market.124

VCOSS suggested that the ACCC’s retail price analysis should include an examination of: price dispersion among market offers and between standing/default and market offers; the number of market offers exceeding the DMO/VDO price levels; the size and prevalence of discounting; pricing time periods and the timing of price changes; and pricing among the big retailers and the small- to mid-tier retailers over time. VCOSS also submitted a number of measures looking at the distribution of vulnerable customers across standing and market offers and what they are actually paying.125

Origin agreed that the ACCC should focus on both the level and spread of retail prices. However, Origin also emphasised the need for the ACCC to exercise care in tracking changes in retail prices given recent

117 Department of State Growth (Tasmania), Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 2 January 2019, p. 1.
120 Beovista, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 6.
121 Consumer Action Law Centre, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 3.
123 National Farmers’ Federation, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 3.
price freezes and reductions applied by retailers despite rising input costs, submitting that these recent changes will affect the baseline period in any comparison. Origin suggested that the expected market outcomes should focus on two areas: ensuring customers in hardship are on the lowest priced offers; and that there are no barriers to customers comparing offers.

Finder submitted that retail price data should reflect the experience of all Australians, and that it is important that rural and regional markets, which often have fewer providers and higher prices, are also considered.

EnergyAustralia questioned the value of data presented for some of the socioeconomic and demographic categories collected by survey given the small sample size. EnergyAustralia submitted that the ACCC should report on the level and spread of headline market offers and also the prices affected by discounting and rebates to accurately capture what the customer actually pays.

Meridian Energy is of the view that comparing prices internationally is not relevant given different macro forces and market design. Meridian Energy submitted that the ACCC should consider collecting data on the number of customers on expired benefit contracts and how much they could be paying on a comparable market offer.

The Queensland Competition Authority (QCA) suggested that the ACCC use data from Energy Made Easy to monitor electricity prices in the NEM, noting that this would not require retailers to respond to information notices and allows each retailer’s prices to be presented by distribution zone. The QCA also encouraged the ACCC to consider how to present bill outcomes that are comparable to the DMO in each distribution zone across the NEM, noting that such comparisons will be of interest to governments and policymakers. The QCA also observed a number of inconsistencies in the way in which different regulators present types of electricity bills and the treatment of incentives and benefits.

AGL encouraged the ACCC to rely on the AEMC’s analysis and conclusions in its annual review of retail competition when considering the electricity prices faced by customers in the NEM, including the level and spread of prices offers.

Hydro Tasmania submitted that the ACCC should only monitor prices in Tasmania if the regulatory framework changes because prices are still subject to direct price regulation. In the event that the ACCC does seek to monitor or make comparisons with prices in Tasmania, Hydro Tasmania outlined a number of its unique mix of supply and demand attributes that would need to be taken into account.

PIAC submitted that, in addition to the assessment measure employed in the REPI, the ACCC should include monitoring actual final bill data. For example, PIAC suggested that the analysis breaking down consumer cohorts and monitoring the unit price they pay was valuable and should be repeated, but presented in conjunction with the final bill and usage data from which it is derived. PIAC also suggested that the ACCC monitor the way in which retailers structure their charges by monitoring

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128 Finder, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 3.
135 Public Interest Advocacy Centre, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 20 December 2018, pp. 4–5.
the spread of retail offers by proportion of fixed (daily charges) and variable (usage) charges and also the average change in variable charges tracked against the change in wholesale, network and other costs.\textsuperscript{137}

\section*{Conclusion}

There was general agreement amongst the submissions with the ACCC’s intent to monitor the level and spread of offers available in the NEM. Many of the submissions noted the need for the ACCC to also monitor the actual or effective prices paid by individual consumers and businesses over time. Further, submissions highlighted the Australian Government and Victorian Government’s intention to implement the DMO/VDO and reference bill amounts, and suggested that the ACCC monitor the effects of these changes on the outcomes. The ACCC agrees that all of these will be an important part of our ongoing analysis.

In relation to the implementation of the DMO/VDO, the ACCC intends to monitor whether retailers are complying with their obligations and whether customers are generally receiving a better deal. Under the draft Code, the ACCC will have an enforcement role, and a breach carries financial penalties. We will undertake this role alongside our general enforcement role under the Australian Consumer Law, which prohibits misleading and deceptive conduct.

The ACCC expects that customers who are inactive or disengaged in the market for whatever reason will see a reduction in their electricity prices with the application of the DMO/VDO.

Consistent with the AER’s view expressed in its Draft Determination, we would expect that customers who are on standing offers that are currently lower than the DMO price to not be disadvantaged in any way by the introduction of the DMO price.\textsuperscript{138} The AER notes that the DMO price is a maximum price, and there is no basis or requirement for standing offer prices to be increased to the DMO price level. As outlined in section 3.2, a number of retailers introduced discounts off some of their standing offers in January 2019. The AER suggests that these discounted prices appear to reflect what the retailers themselves consider are a fairer level of standing offer prices for this subset of customers, and the AER expects that standing offer customers who are currently benefitting from a retailer discount would continue to receive the discounted price after the implementation of the DMO.

We also expect that the requirements for retailers to advertise offers in comparison with a common reference price will improve the state of competition and improve outcomes for many customers by being better able to identify the best offer for them.

As highlighted by the large number of indicators and charts used by the ACCC in its REPI report, the various reports of other agencies such as the AER, and not least the submissions received to our Discussion Paper, there are numerous forms in which we can report on the level and spread of retail prices. Our main aim will be to analyse a number of indicators in each report to get an understanding of how retail prices are changing in each NEM region and for the various customer segments. As a starting point, we intend to monitor the following:

\begin{itemize}
  \item compliance of ‘standing’ offer levels not being higher than the DMO/VDO prices
  \item level and spread of ‘standing’ offer or DMO/VDO prices and the average annual bill that results
    \begin{itemize}
      \item number or proportion of customers on ‘standing’ offer or DMO/VDO prices
    \end{itemize}
  \item level and spread of ‘market’ offer prices and the average annual bill that results
    \begin{itemize}
      \item number or proportion of customers on ‘market’ offers
    \end{itemize}
  \item analysis of actual prices paid by customers, such as the average price (i.e. retailer’s total revenue/number of customers) or actual bills and whether customers achieve discounts available
  \item observations about the structure of charges, the level and spread of pricing offers and other related issues based on publicly available information (including, for example, reports by the AER and AEMC) and samples of customer bills.
\end{itemize}

\textsuperscript{137} Public Interest Advocacy Centre, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 20 December 2018, p. 7.

We intend to monitor and report on these indicators from a NEM-wide perspective as well as in each NEM region or distribution zone and in relation to various customers segments such as residential and business. As part of our analysis, we will also look at the impacts on vulnerable customers, such as those on concessions or hardship plans. We consider this will assist to inform our analysis of outcomes for particular customers in the NEM.

We note that much of the data relating to the level and spread of offers and structure of charges is collected and published by the AER\textsuperscript{139} and DELWP Victoria\textsuperscript{140}, or is otherwise publicly available, and we intend to rely on that information for the purposes of our monitoring work as far as possible. We do also note that the AER has recently revised its guidelines with respect to the assumed usage amounts when undertaking analysis for an average customer, and we intend to be consistent with the AER’s methodology for our monitoring purposes.\textsuperscript{141}

We do however envisage that we will need to obtain certain information from retailers for the purposes of undertaking analysis on average and actual prices paid, including information about revenues received, the number or proportion of customers on particular offers and whether they achieved available discounts.

3.3.4 Underlying costs of a customer’s bill, including retailer costs and profits

The underlying costs that make up a customer’s bill, including the costs and profit margins of retailers, is an important driver in the level and spread of prices (discussed above) and the outcomes for customers. Movements in the various aspects of the underlying costs will inform an analysis of trends in prices and whether they reflect an efficient cost base and outcome for customers.

Effective competition in the retail market is expected to place downward pressure on the costs and profit margins of retailers. Similarly, retailers will pass through any reduction in other underlying costs rather than keep the reductions as a windfall gain. It follows that in an effectively competitive market, no retailer or group of retailers will be able to raise prices above their efficient costs of supply to earn sustained excess profits.

The ACCC identified in the REPI that the costs that make up a customer’s bill comprise a mixture of regulated and market-based costs. The ACCC examined the underlying cost components and their relative contributions to the effective price of an average residential customer in the form of a ‘cost-stack’, with an example from the REPI report provided in the following figure.\textsuperscript{142}

\textsuperscript{139} AER, 	extit{Energy Made Easy}, \url{https://www.energymadeeasy.gov.au/}.

\textsuperscript{140} Department of Environment, Land, Water and Planning (Victoria), \textit{Victorian Energy Compare}, \url{https://compare.energy.vic.gov.au/}.

\textsuperscript{141} AER, \textit{Guidance on energy consumption benchmarks on residential customers' bills—version 1.0}, December 2017.

\textsuperscript{142} ACCC, \textit{Restoring electricity affordability and Australia’s competitive advantage}, Retail Electricity Pricing Inquiry—Final Report, June 2018, p. 8.
Retailer costs fall into two key categories:

- ‘costs to serve’ (CTS), which are the operating costs retailers face in servicing their customers, including billing systems and processes, customer enquiries, management of debt and compliance with regulatory obligations.
- ‘customer acquisition and retention costs’ (CARC), sometimes referred to as the ‘costs of competition’, include the costs of acquisition channels (for example, third-party comparison websites, door-to-door sales, telemarketing), other marketing spend, retention teams and related costs.\(^{143}\)

The ACCC found that retailer costs, and particularly those costs associated with acquiring customers (such as marketing costs and commissions paid to third-party comparators) have been growing since the retail market was opened to competition.\(^{144}\)

The ACCC also found some indications from an examination of retailer profit margins, and particularly those of the ‘big three’ where margins remain high with an upwards trend, that competition is not working as effectively as it could be.\(^{145}\)

**Submissions**

Vocus Group submitted that the ACCC needs to carefully consider trends concerning wholesale electricity and network costs given the significant impact these inputs have on retail prices.\(^{146}\)

CALC submitted that the ACCC should seek retailer data on the extent retailers are maximising profits from disengaged customers to subsidise discounts and special offers from others. It was also of the view that the ACCC should undertake an ongoing examination of the cost-stack for prices including

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more granular, business by business information about costs that escalate in the competitive energy market like CARC costs.\textsuperscript{147}

VCOSS supported the continuation of cost-stack analysis that differentiates between retail costs and retail margins and the changes in these over time. VCOSS recommended that the ACCC undertake more analysis around drivers of retail costs and whether CARC costs change over time or vary by jurisdiction.\textsuperscript{148}

Origin contended that measures of profitability such as gross and net margins are limited in terms of a measure of competitiveness or as a means of understanding the returns to energy businesses.\textsuperscript{149} Origin suggested that:

- The ACCC should not rely on short-term snapshots of incomplete metrics such as EBIT or EBITDA, but seek to obtain information to allow it to analyse the risk-adjusted net margin of electricity suppliers that consider the extent to which businesses are achieving a return on capital over time.

- It is more useful to examine margins at an industry, rather than individual business level, which is consistent with the AEMC’s view. This approach acknowledges that innovation or efficiencies can enable a business to temporarily increase margins prior to a response from its competitors. Any benchmarking analysis will only be useful if this is against comparable industries.

- The cyclical nature of the energy market means margins are likely to move over time and so point in time estimates provide only a limited measure of market competitiveness. For example, an observation of wholesale margins at times where there is a low reserve margin and consequently higher prices does not reflect periods of market oversupply and lower margins, which would provide a more balanced view of returns.\textsuperscript{150}

ERM Power noted that for the analysis of retailer profitability, financial statements should provide sufficient information for listed companies.\textsuperscript{151}

EnergyAustralia submitted that the ACCC should look to improve the accuracy and analysis of key measures of interest, including the cost-stack analysis, which EnergyAustralia considers is likely the most useful and should be a focus for the ACCC.\textsuperscript{152} EnergyAustralia also submitted that EBITF (earnings before interest, tax, and fair value adjustments) is a more appropriate measure of retail profitability than EBITDA and EBIT used by the ACCC in its REPI report. Also, that the ACCC should track results over time rather than try to normalise and compare measure across businesses.\textsuperscript{153}

Meridian Energy noted that the nature of vertical integration with differing company structures means that there is no simple one size fits all allocation method for the purposes of undertaking cost-stack analysis.\textsuperscript{154}

Hydro Tasmania observed that in a competitive environment, retailers will pass through cost reductions from wholesale and network elements whenever these arise. However, Hydro Tasmania also cautioned that if retail tariffs do not fall by the same quantum that the ACCC determines they should, then the ACCC should not necessarily assume that this reflects any decision by the retailer to deny savings to its

\textsuperscript{147} Consumer Action Law Centre, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 3.


\textsuperscript{151} ERM Power, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 6.

\textsuperscript{152} EnergyAustralia, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 3.

\textsuperscript{153} EnergyAustralia, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 4.

\textsuperscript{154} Meridian Energy, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 3.
customers. Hydro Tasmania submitted that any assessment of retailer returns must include a thorough analysis of the broader costs of participating in the market.\textsuperscript{155}

PIAC supported the separate consideration of CARC costs, and suggested that the CARC analysis be improved by monitoring:

- acquired customer CARC expressed as the extent of ‘cross subsidy’
- the main types of CARC costs by retailer/retailer type (tier 1, tier 2 and tier 3)
- charges and commissions for comparison sites and other acquisition agents
- change in CARC figures over time and tracking these figures against the number of competitors, relative market share of competitors, and the number and proportion of customers switching or ‘churning’ annually.\textsuperscript{156}

Many of the submissions also noted challenges and concerns with establishing a relationship between wholesale costs and retail prices. These are outlined in the wholesale section of this report.

**Conclusion**

For the reasons already identified, understanding the underlying costs of retailers and their relative contributions to a customer’s bill will be a key part of our ongoing analysis. In particular, we will need to analyse changes in the underlying costs and seek to understand how those changes have influenced trends in retail prices.

Many of the submissions provided support for the continuation of the ‘cost-stack’ analysis that was undertaken by the ACCC in the REPI and particularly to the ACCC reporting in trends in this measure over time. As observed by EnergyAustralia, this analysis is likely to be useful to a range of stakeholders. We consider this to be particularly so as the ACCC used information obtained from retailers that was not otherwise available to interested parties, and which enabled a more thorough and detailed analysis. However, some submissions also raised concerns around the difficulties involved in getting consistent information on the breakdown of the underlying costs components across different retailers (for example, getting wholesale or retail-only costs in the case of the vertically integrated energy providers). These challenges were also recognised by the ACCC in its REPI report, and for the same reasons outlined in that report we do not consider these to be insurmountable for the purpose of our ongoing analysis. We expect to work with retailers to establish data requirements and allocations that take into account their individual circumstances.

In relation to retailer costs, we agree with submissions that suggest it will be important to track trends not only in relation to total costs but also break this down into CTS and CARC. As specifically raised by PIAC, we expect that it will be necessary to understand the different types of CTS and CARC costs and will likely need to seek further detail from retailers as appropriate about why these costs are moving over time.

Finally, in relation to the appropriate measure of profit margins, a number of submissions suggested alternative measures to EBITDA and EBIT as used by the ACCC in its REPI report. As acknowledged by the ACCC in that report, there is no single best indicator, but EBITDA and EBIT are among those commonly used. Importantly, we intend to focus on our analysis on trends in such measures over time rather than simply assessing levels at a single point in time, and we consider that this mitigates against many of the concerns raised.

Given the above, we consider that the following indicators will provide a useful starting point for our ongoing analysis:

- cost-stack analysis of the underlying cost components that make up the total of an average customer’s bill
- retailer costs and profit margins, categorised as:

\textsuperscript{155} Hydro Tasmania, *Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia*, 21 December 2018, p. 2.

\textsuperscript{156} Public Interest Advocacy Centre, *Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia*, 20 December 2018, pp. 6-7.
Monitoring of supply in the National Electricity Market

- total and average retail costs for a customer bill
- total and average CTS costs for a customer bill
- total and average CARC costs for a customer bill
- EBITDA and EBIT of the retail arm of businesses.

Where relevant and appropriate, we intend to report on these indicators from a NEM-wide perspective, each NEM region and for particular customer segments, such as residential and business customers. We consider this will assist to inform our analysis of outcomes for particular customers in the NEM.

With the exception of certain EBITDA and EBIT information that will be available in public financial statements of listed energy providers, we expect that this information will need to be collected directly from retailers as it is not otherwise available. We do also note that the AER has recently revised its guidelines with respect to the assumed usage amounts when undertaking analysis for an average customer, and we intend to be consistent with the AER’s methodology for our monitoring purposes.157

Finally, with respect to specifically examining whether wholesale cost savings are being passed through to customers, whilst this issue will inform our analysis in relation to retail costs and profit margins and also retail prices, our analytical framework and approach is discussed in the wholesale section of this report.

3.3.5 Retail product and service differentiation and innovation

While price is often the primary focus of outcomes for customers, other forms of retail differentiation and innovation are also important to take into account. Indeed, although electricity is itself a homogenous product, there remains scope for differentiation and innovation in a number of areas such as enhancing customer convenience and experience. For example, some retailers may provide assistance to customers in installing solar PV systems and batteries, or other emerging technologies. Effective competition would be expected to drive retailers to seek out these opportunities to add value to winning customers.

In its REPI report, the ACCC noted some positive signs of innovation around, for example, pricing and billing, and observed that much of the innovation is coming from smaller retailers in the market. For example, some energy service providers are improving the value households can receive from their own investments in solar PV systems and batteries by providing analytics that enable them to make more informed consumption decisions.158 However, the ACCC also found that such innovation was still in its very early stages and many customers at this point in time simply prefer a lower price.159

As noted earlier, the ACCC made recommendations in its REPI report concerning the implementation of cost-reflective network prices, while also noting that retailers should not be obligated to reflect the cost-reflective network tariff structure in their customers’ retail tariffs, but should be free to innovate in the packaging of the network tariff as part of their retail offer.

Submissions

Beovista submitted that the installation and use of energy conservation measures that aim to reduce overall consumption and potentially demand could be included more fully in the ongoing monitoring work to understand its impact on electricity supply and pricing.160

CALC submitted that it is important for the ACCC to monitor the emergence of new services and technology to ensure that regulators, government, consumers and industry are aware of emerging issues that need addressing.161

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157 AER, Guidance on energy consumption benchmarks on residential customers’ bills—version 1.0, December 2017.
Conclusion

We intend to monitor developments in product and service differentiation and innovation and the extent to which these are valued by customers and result in a change in market structure and the competitive landscape.

3.3.6 Customer awareness, understanding and participation in the market

As already described, the level of customer participation in the retail market is a significant factor in the effectiveness of competition. Customers should be able to easily navigate the retail market, with the ability to identify and compare available offers and act to select the best deal for them, thereby driving competition between retailers to win business.

The ACCC found in the REPI that many consumers are disengaged from the retail electricity market because they find it too time-consuming, complex or confusing to compare offers. As a result, consumer trust and confidence in the retail market is lacking. Indeed, in its 2018 Retail Energy Competition Review\textsuperscript{162}, the AEMC found that residential consumer confidence in the energy market decreased significantly in 2018, with large retail price increases, and heightened media and political interest in the sector. Using data from Energy Consumers Australia’s Energy Consumer Sentiment Survey, the AEMC noted that electricity is the expenditure item of most concern to households and consumer trust in the energy market was 39 per cent in 2018, a reduction from 50 per cent in 2017.\textsuperscript{163}

Outlined below are some of the ways beyond just the control of the retailers in which customer understanding and participation can be affected.

Comparator websites and third-party intermediaries

Comparator websites and other third-party intermediaries can provide important tools to assist customers to more easily engage with the retail market. In a well-functioning market, it is expected that these services would improve the transparency and comparability of offers available in the NEM and assist in delivering positive outcomes for customers.

However, the ACCC identified in the REPI that commercial third-party intermediaries, such as commercial comparators, switching services, connection services and brokers, are in many instances not delivering good outcomes for consumers. For example, the ACCC found that while the government-run comparator websites are required to display all ‘generally available’ offers, there is no equivalent requirement for commercial comparator websites. Further, while government-run comparator websites typically operate free of charge to the user, commercial comparator websites are remunerated either directly or indirectly by the retailers that they promote through the site. The ACCC found that commercial comparator websites often lacked transparency about the proportion of offers covered and commissions paid by retailers, and noted that customers were therefore not necessarily being recommended the best deal available for their particular circumstances.

The ACCC made a number of recommendations in its REPI report aimed at improving outcomes for customers using third-party intermediaries. In particular:

- recommendation 31 was for the CDR to apply to the electricity sector as a priority so that consumers and their authorised representatives can access at least consumption data, product data, meter data and other customer data that would enable better use of comparator websites or otherwise improve customers’ ability to compare offers
- recommendation 34 was for the Australian Government to prescribe a mandatory code of conduct for third-party intermediaries requiring that, for example, offers be recommended based on price benefit to the consumer rather than the size of the commission received by the third-party
- recommendation 35 was for consumers to provide their consent for third-party intermediaries to deal with retailers and facilitate switching on their behalf

\textsuperscript{162} AEMC, 2018 Retail Energy Competition Review, 15 June 2018.
recommendation 36 suggested that the Australian Government and Victorian Government commit to ongoing funding to raise awareness of the government-run comparator websites.

recommendation 52 was for state and territory governments to fund small business organisations to provide tailored retail electricity market advice. We suggested that the fund should total $10 million over three years and be awarded on a competitive basis to small business representative organisations providing information, tools and advice to small businesses on retail electricity choices.

As highlighted in section 3.2, there is some progress in relation to recommendation 31. Also, the Australian Government has progressed recommendation 52 through its recently announced Business Energy Advice Program (BEAP). The BEAP is intended to deliver trusted advice to help small businesses get better energy deals and reduce their energy usage. There are two components to the program:

- an energy advisory service ($10 million over 3 years), where the Australian Government will procure roll-out partner/s to deliver help to small businesses (businesses that employ between 6–20 employees) to understand their energy saving opportunities and more effectively switch retailers
- an energy benchmarking tool ($1.6 million), where the Australian Government will develop a digital application that allows small businesses to compare their energy use and costs against their peers.

Successful tenders are expected to commence provision energy advice services from 25 March 2019.

We reiterate our view expressed in the REPI that competition in the electricity sector would be further enhanced through the implementation of REPI recommendations 34, 35 and 36. The first two in particular would assist consumers to more easily switch between retailers and improve transparency for consumers that a comparator site may not necessarily contain all or indeed the best offers from retailers.

Additional protections for vulnerable customers

As is the case in various other sectors and markets, it is important that vulnerable and disadvantaged consumers in the electricity market are afforded extra protections due to the particular barriers these consumers face when engaging with the retail market. Regardless of what steps are taken to reduce prices, or reduce complexity, some vulnerable consumers will require additional assistance. These vulnerabilities may include: financial hardship, mental health issues, language barriers for culturally and linguistically diverse (CALD) communities, or temporary trauma associated with an accident or illness. Additional protections are especially important for those consumers in markets for essential services, such as electricity. In a well-functioning market, vulnerable and hardship customers would be on the lowest-priced offers.

As already discussed, the ACCC found in the REPI that many vulnerable customers are on some of the highest-priced offers, either because they are on the high-priced ‘standing’ offers, or because they are on inappropriate ‘market’ offers (such as those with conditional discounts and high penalties for not meeting conditions). The ACCC made a number of recommendations in the REPI report that are aimed at having an immediate positive impact on the prices paid by vulnerable customers, including the implementation of the DMO and reference bill amounts as set out earlier. Other recommendations included:

- recommendation 37, which was for COAG to improve concessions schemes across the NEM to ensure that, to the extent possible, there is a uniform, national approach
- recommendation 38, which was for governments and territories to jointly fund a grant scheme to provide targeted support to assist vulnerable consumers to improve energy literacy.

We note that the AER collects and publishes data from energy retailers relating to vulnerable customers through its monitoring of hardship programs in its quarterly and annual retail compliance reports. The AER also drafts and enforces compliance with a range of guidelines designed to protect vulnerable customers.

customers, such as its Hardship Guidelines discussed below, which has been progressed in line with REPI recommendation 39.

Submissions

In addition to seeking retailer data on retailer switching activity, CALC submitted that the ACCC should consider whether customers are experiencing benefits of a competitive market, whether there is information failure, and the extent to which behavioural biases may be affecting consumer decision-making.\(^{165}\)

CALC also suggested that the ACCC should gather information and monitor the costs paid to switching services for acquisition, and how the offers of these customers compare to the best offer available to them.\(^{166}\) Further, that the ACCC should monitor the ‘loyalty tax’ by monitoring how much the number of customers who have not switched for five years or more are paying\(^{167}\) and the extent retailers are maximising profits from disengaged customers to subsidise discounts and special offers from others.\(^{168}\)

Several submissions explicitly suggested ongoing monitoring of metrics in relation to vulnerable consumers. CALC suggested that the ACCC gather information and analyse: retailers’ hardship assistance systems; data on the under-consumption of energy (i.e. when consumers use less than is safe to keep their home at a comfortable temperature for health purposes or going without cooking, refrigeration or other essential energy use); the number of customers who are accessing hardship programs or payment difficulty assistance but are not on the best priced offer\(^{169}\); the introduction of standard statements by retailers on hardship policies by the AER and whether this is sufficient in overcoming issues identified with energy retailers’ assistance for people in payment difficulty or hardship\(^{170}\); and the number of customers accessing concessions or other government support payments for energy who are not on the best-priced offer.\(^{171}\)

Similarly, VCOSS submitted that the ACCC should analyse whether the NEM is delivering fair, equitable electricity supply, particularly to people vulnerable to energy hardship, including people on low incomes, renters, people with disability or long-term health conditions, and households with children.\(^{172}\) VCOSS suggested that the ACCC measure: the distribution of low-income and vulnerable customers across standing/default offers and market offers; the actual prices paid by low-income and vulnerable customers, including hardship customers and those using payment plans or the Victorian payment difficulty framework; and the proportion of household income spent on electricity across different income groups including people reliant on Newstart and other income support payments, similar to the models used by the Australian Council of Social Service and the Brotherhood of St Laurence.\(^{173}\)

Conclusion

As recognised in the submissions, a good indicator of customer engagement is the number of customers in the NEM switching between retailers and between offers and the ACCC intends to incorporate this kind of analysis in its ongoing monitoring work. Indeed, switching activity is one indicator that customers are considering their options and actively seeking out a better deal. On the

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165 Consumer Action Law Centre, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 3.

166 Consumer Action Law Centre, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 5.


168 Consumer Action Law Centre, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 3.


other hand, switching activity may also indicate dissatisfaction with respect to the service provided by an existing retailer.

For this reason, when monitoring customer switching activity, we will also consider the potential link to other indicators, such as retailer CARC costs (see section 3.3.4) and observations of customers’ general satisfaction with retailers. Other indicators are potentially more difficult to measure, such as the number of customers who seek out a better deal but decide to stay on their existing plan for whatever reason. Nevertheless, we have set out indicators in relation to the retail market structure that can provide some insight, including length of tenure of customers, and we can also consider seeking data from retailers about their retention or win back strategies. We also consider that these types of indicators will be picked up more generally in response to surveys about customers’ experiences with the market and our findings in relation to the advertising practices of retailers (i.e. whether information being provided to customers is improving their ability to engage with the market should they seek to do so).

As suggested by CALC, we consider it will be important to monitor the extent to which commissions paid by retailers to third-party intermediaries are having an impact on the market. As indicated in many of the submissions, we also consider it will be important to understand how the market is working for the most vulnerable customers. We expect that these kinds of matters will be picked up in our analysis of retailer advertising practices, level and spread of price offers and retailer costs and profit margins outlined in previous sections. In addition, we agree that a number of the additional indicators as suggested by CALC will be useful for informing our analysis, as will the AER’s work in relation to vulnerable customers.

In particular, we note that the hardship rule change (REPI recommendation 39) has now been implemented. On 15 November 2018, the AEMC made a rule change to require the AER to develop Hardship Guidelines that include consistent and specific statements that retailers must include in their hardship policies. This rule change is intended to help customers who are having trouble paying their bills due to hardship to better understand their rights and get the help they need to pay their bills. The AER must have the Hardship Guidelines in place by 1 April 2019. The AER released draft guidelines on 4 February 2019 for public consultation until 4 March 2019. We intend to observe the impact of these guidelines in practice.

Finally, it is noted that we intend to monitor the progress of initiatives such as the CDR and the Energy Charter (discussed in section 3.2.5) to see how these are influencing customer awareness, understanding and participation in the market and the impact they are having on customer outcomes.

Given the above, we intend to monitor the following kind of indicators:

- customer switching activity
- retailer retention and win-back strategies and activity
- analysis of the indicators set out in earlier sections on certain customer segments, such as vulnerable/hardship customers
- analysis of data pertaining to customer complaints and hardship/concession or other assistance programs
- observations of customer awareness, understanding, and participation and satisfaction in the market and other related issues based on publicly available information (including, for example, reports by the AER) and comments or surveys from market participants.

We note that some of this information is publicly available. For example, every month the Australian Energy Market Operator (AEMO) publishes the numbers of retail transfers registered in the MSATS system and we intend to rely on this information as much as possible.

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175 Market Settlement and Transfer Solutions.
3.4 Summary of monitoring measures for the retail market

It is clear from the preceding sections that there are a number of indicators we can analyse to monitor the effectiveness of competition in the retail market and outcomes for customers.

In addition to public sources of information, we expect to use our inquiry powers to compulsorily request data and documents from market participants as needed to supplement this information. The ACCC is able to shed light on aspects of the market through this information obtained under our information gathering powers under section 95ZK of the CCA. As was the case in the REPI, we expect to continue to utilise our information gathering powers in order to assist in our monitoring of the supply of electricity to consumers to supplement publicly-available information to provide a more informed assessment of the state of the market. Where analysis is already being undertaken by other agencies, we will seek to draw on that work, rather than collecting the underlying data again ourselves.

Table 3.1 below summarises what we have outlined in this section as the likely kinds of measures and indicators we expect to use to inform our analysis.
<table>
<thead>
<tr>
<th>Topic</th>
<th>What we are likely to monitor</th>
<th>Likely data sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retail market structure</strong></td>
<td>Number of retailers</td>
<td>AER and ESC Vic, and other publicly available information where necessary</td>
</tr>
<tr>
<td></td>
<td>Market share of retailers</td>
<td>AER and ESC Vic, and other publicly available information where necessary</td>
</tr>
<tr>
<td></td>
<td>Number of retailers that are vertically integrated</td>
<td>AER and ESC Vic, and other publicly available information where necessary</td>
</tr>
<tr>
<td></td>
<td>Length of tenure of customers for the ‘big three’ retailers compared to other retailers</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>Observations about concentration in the retail market and barriers to competition, entry and expansion and any emerging issues</td>
<td>Public reports and information and comments or surveys from market participants</td>
</tr>
<tr>
<td><strong>Retailer advertising practices</strong></td>
<td>Number or proportion of ‘standing’ offers and ‘market’ offers</td>
<td>AER (Energy Made Easy) and DELWP (Victorian Energy Compare), and other publicly available information where appropriate</td>
</tr>
<tr>
<td></td>
<td>Number or proportion of ‘market’ offers with no discounts attached</td>
<td>AER (Energy Made Easy) and DELWP (Victorian Energy Compare), and other publicly available information where appropriate</td>
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<tr>
<td></td>
<td>Number or proportion of ‘market’ offers with unconditional discounts, including the type and level of discount</td>
<td>AER (Energy Made Easy) and DELWP (Victorian Energy Compare), and other publicly available information where appropriate</td>
</tr>
<tr>
<td></td>
<td>Number or proportion of ‘market’ offers with conditional discounts, including the type and level of discount and the effect if conditions are not met</td>
<td>AER (Energy Made Easy) and DELWP (Victorian Energy Compare), and other publicly available information where necessary</td>
</tr>
<tr>
<td></td>
<td>Number or proportion of customers on the various types of ‘market’ offers, and the number or proportion of customers who did not achieve available discounts</td>
<td>AER and ESC Vic, and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Observations about the advertising practices of retailers, particularly in relation to ‘headline’ discounts and any other related issues</td>
<td>Public reports and information and comments or surveys from market participants</td>
</tr>
<tr>
<td><strong>Retail prices, including level and spread of price offers</strong></td>
<td>Level and spread of ‘standing’ offer or DMO/VDO prices and the average annual bill that results</td>
<td>AER (Energy Made Easy) and DELWP (Victorian Energy Compare), and other publicly available information where appropriate</td>
</tr>
<tr>
<td></td>
<td>Number or proportion of customers on ‘standing’ offer or DMO/VDO prices</td>
<td>AER and ESC Vic, and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Level and spread of ‘market’ offer prices and the average annual bill that results</td>
<td>AER (Energy Made Easy) and DELWP (Victorian Energy Compare), and other publicly available information where appropriate</td>
</tr>
<tr>
<td></td>
<td>Number or proportion of customers on ‘market’ offer prices</td>
<td>AER and ESC Vic, and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Analysis of actual prices paid by customers, such as average price (i.e. retailer revenue/number of customers) or actual bills and whether conditional discounts have been achieved</td>
<td>Public financial statements of retailers and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Observations about the structure of charges, the level and spread of pricing offers and other related issues</td>
<td>Public reports and information and comments or surveys from market participants</td>
</tr>
<tr>
<td><strong>Underlying costs of a customer’s bill, including retailer costs and profits</strong></td>
<td>Cost stack analysis of costs that make up the total bill for a customer</td>
<td>ACCC information gathering powers</td>
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<tr>
<td></td>
<td>Analysis of total and average retailer costs</td>
<td>ACCC information gathering powers</td>
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<td></td>
<td>Analysis of total and average CTS retail costs</td>
<td>ACCC information gathering powers</td>
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<tr>
<td></td>
<td>Analysis of total and average CARC retail costs</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>EBITDA and EBIT of retail arm of business</td>
<td>Public financial accounts and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td><strong>Retail product and service differentiation and innovation</strong></td>
<td>Monitor developments in product and service differentiation and innovation and the extent to which these are valued by customers and have an impact on the competitive landscape</td>
<td>Public reports and information and comments or surveys from market participants</td>
</tr>
<tr>
<td><strong>Customer awareness, understanding and participation in the market</strong></td>
<td>Levels of switching between retailers and/or offers</td>
<td>AEMO and ACCC information gathering powers where necessary</td>
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<tr>
<td></td>
<td>Retailer retention and win back strategies and activity</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>Analysis of aforementioned indicators on certain customer segments, such as vulnerable/hardship/concession customers</td>
<td>As above, including ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Analysis of customer complaints and vulnerable/hardship/concession or other assistance programs</td>
<td>Public reports, and information, comments or surveys from market participants as well as ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Observations of customer awareness, understanding, participation and satisfaction in the market and other related issues</td>
<td>Public reports and information and comments or surveys from market participants</td>
</tr>
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</table>
4. Wholesale market

4.1 Relevant Terms of Reference

As one of the major contributors to retail electricity prices, the wholesale electricity market is relevant to most of the inquiry’s Terms of Reference. A number of concerns have also been raised about concentration, participant behaviour, and the impact of policy in the wholesale market, which will make it a major focus of our monitoring activities.

We note that, of particular relevance are Terms of Reference:

(i) ... analysing how wholesale prices are influencing retail prices and whether any wholesale cost savings are being passed through to retail customers
(ii) wholesale market prices including the contributing factors to these such as input costs, bidding behaviour and any other relevant factors
(iii) the profits being made by electricity generators ... and the factors that have contributed to these
(iv) contract market liquidity, including assessing whether vertically integrated electricity suppliers are restricting competition and new entry, and
(v) the effects of policy changes in the National Electricity Market, including those resulting from recommendations made by the ACCC in its Retail Electricity Pricing Inquiry report of June 2018.

4.2 Updates on the wholesale market

In the following section, we provide an update from our final REPI report on relevant indicators, using publicly available information.

4.2.1 Spot market prices

The ACCC identified in our final REPI report that the highest average quarterly wholesale market prices in recent years were during the first half of 2017 and that, by June 2018, prices in Queensland and NSW had eased while those in Victoria, SA and Tasmania remained elevated.176

In the six months to December 2018, wholesale market prices rose slightly from June 2018 levels in Queensland and NSW, but declined in Victoria, SA and Tasmania.

However, as shown in figure 4.1, wholesale market prices remain significantly higher than the average for the period 2008–14. As we discussed in the REPI, the longer-term increase in wholesale prices is due to a number of factors including tightening of the supply and demand balance and increasing fuel costs. Large coal-fired generation has left the market meaning higher priced generators are setting the price more often. This, combined with the higher price of coal and gas has led to a large increase in wholesale prices.

176 ACCC, Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final Report, June 2018, p. 47.
More recently, 2019 prices hit extreme levels in January in Victoria and South Australia, as high temperatures coincided with several outages at coal-fired generators in Victoria. This led to a situation where the spot price in Victoria reached the market price cap of $14,500 on both 24 and 25 January, with settlement prices exceeding $10,000/MWh for six hours in each state across the two days. The long stretches at extreme prices resulted in monthly average spot prices of $349/MWh in Victoria and $358/MWh in SA, as shown in figure 4.2. These sustained high prices caused AEMO to administer price caps for SA and Victoria. This was the first time since 2009 that the cumulative price threshold (designed to reduce risk to business of sustained high price events) was reached. Other regions also experienced high wholesale prices in January, though not to the same degree as Victoria and SA.

Despite high prices and the Reliability and Emergency Reserve Trader (RERT) being called upon, supply could not meet demand and AEMO began involuntary load shedding in Melbourne suburbs on a rolling basis. In SA, back up diesel generators purchased by the SA Government in 2017 were switched on as part of the RERT, but load shedding was not required.

The AEMC is currently considering a rule change request to enhance the RERT. The AEMC states that the system is transitioning due to the changing mix of generation and an increase in weather extremes. These factors are making the power system less stable, more volatile and difficult to operate. A recent report released by the Grattan Institute also highlighted the risk of increased summer blackouts if there is not adequate new investment. However, as noted in the Grattan report, generation shortfalls account for very few outages in the NEM, making up only 0.1 per cent of all outages in the past ten years. Generation shortfalls are costly when they do occur, as they result in extreme prices such as those experienced in Victoria and South Australia in January 2019.

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The forward curve for wholesale electricity prices is broadly similar to what we observed at the end of the REPI, with mainland NEM state wholesale market forward prices peaking in the first quarters of 2019 and 2020 (figure 4.3). However, the forward curve has broadly shifted up after the recent extreme price events in Victoria and SA. On current trading, summer 2020 looks like it will be expensive again, especially in Victoria and SA.

Source: ACCC analysis of AEMO data.

Note: Volume weighted average price is weighted against native demand in each region. Native demand is the sum of initial supply and total intermittent generation in a region.
4.2.2 Contract market liquidity

Conditions in contract markets remain similar to what we observed in the final REPI report. Figure 4.4 compares the quantity of energy traded for quarterly flat swaps (the most common hedge contract traded) on the ASX market and the quarterly consumption of energy in each region over the two years to December 2018.

Figure 4.4: Total quarterly volume of ASX-traded flat swap contracts vs total consumption, by region, TWh

The charts above identify that contract markets were relatively liquid in Victoria and Queensland, with the volume of quarterly flat swaps traded exceeding the physical consumption in each state. In NSW, trading in this particular product was below physical consumption of electricity but not significantly, suggesting that—once other contract types are incorporated—trading markets in NSW are reasonably liquid.

In contrast, the exchange-traded hedge market in SA was relatively illiquid, with trading levels for ASX contracts well below the overall level of electricity consumption in the state on a proportional basis.

Another indicator of market liquidity, open interest, which measures the number of open contracts and shows how easily a participant can open or close positions, shows similar results. Figure 4.5 shows that there is regular trade in Queensland, Victoria and NSW, while very limited trading in SA.

Source: Volume of ASX-traded flat swap contracts are from the ASX, total consumption figures are from AEMO.
These dynamics in contracting markets are largely unchanged since the final REPI report, with SA continuing to be the market of greatest concern. The low level of trading activity in SA has been identified as a barrier to entry for retailers, and imposes significant wholesale price risk on established players in the region.

4.2.3 Generation profits

Publicly reported measures of profits for generation businesses have been growing as a result of increased wholesale prices. As shown in figure 4.6, profit growth was particularly strong for AGL which owns the largest share of generation assets in the NEM. AGL’s most recent half year profits reached record highs for six monthly earnings for the company. AGL reports that the principal driver of the increase in 1H 2019 was the strong margin growth in Wholesale Markets driven by higher wholesale electricity contracted prices.

Origin reports collectively on its retail and generation business including its solar business through its Energy Markets division. Origin states that the increase in the Energy Markets profits was driven by the higher wholesale electricity prices and natural gas sales which compensated for a fall in retail profits driven by a drop in customer numbers.

CS Energy and Stanwell are both owned by the Queensland Government. Both businesses saw an increase in profits in 2017–18, likely benefiting from higher wholesale prices in the NEM.

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Hydro Tasmania had favourable earnings, following a small profit in 2016–17 and a loss in 2015–16, which it credits to greater production of large scale generation certificates and the sale of more electricity to small business customers.\footnote{Hydro Tasmania, Annual Report 2018, p. 10.}

Snowy Hydro does not distinguish between retail and generator profit in its public reporting. It attributed a decline in profit in 2017–18 to lower than forecast peak demand, unusually high coal plant availability resulting in a decrease in its generation volumes, and generally unfavourable market conditions throughout the year.\footnote{Snowy Hydro Limited and its Controlled Entities, Annual report 2018, p. 10.}

Another major generator in EnergyAustralia also reported positive results in 2018 as its profit from its wholesale operations almost doubled to $923 million in 2018, from $487 million in 2017 (nominal terms, $496 million in real terms). EnergyAustralia attributed high wholesale profit to high wholesale prices as well as an increase in generation.\footnote{CLP Holdings, CLP Holdings 2018 Annual Results Analyst Briefing, 25 February 2019, viewed 7 March 2019, https://www.clpgroup.com/en/investors-information-site/Anaylst%20Brief%20Document/2018%20CLP%20Annual%20Results_Final.pdf, p. 47.}

**Figure 4.6: Profit and loss of various generation businesses, 2012–13 to 2017–18, real $2017–18**

![Graph showing profit and loss of various generation businesses from 2012-13 to 2017-18](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>AGL (Generation) (EBIT)</th>
<th>Origin (Generation and Retail) (EBITDA)</th>
<th>Stanwell (Corporation) (EBIT)</th>
<th>Hydro Tasmania (Generation) (EBIT)</th>
<th>CS Energy (Corporation) (EBIT)</th>
<th>Snowy Hydro (Corporation) (EBT)</th>
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Source: ACCC analysis of public financial results of various generators.

### 4.3 Market and policy developments relating to the wholesale market

The Terms of Reference of the inquiry require the ACCC to monitor the impact of policy developments in the NEM. There are a range of policy and other market developments relating to the wholesale and contract markets. In this section we set out major relevant developments since the REPI. In particular:

- The Australian Government has established a program to underwrite new generation.
- There has been some progress on the Snowy 2.0 and Tasmanian ‘Battery of the Nation’ projects.
- The ‘Retailer Reliability Obligation’ is due to commence on 1 July 2019.
- The AEMC is considering introducing market-making obligations in the contracts market.
- The Queensland Government has established CleanCo, a third government-owned generator in Queensland.
The Australian Government has developed amendments to the CCA that target electricity market conduct. These developments are discussed below.

### 4.3.1 Australian Government underwriting investment in new generation scheme

In response to the REPI recommendation 4, the Australian Government is in the process of establishing the Underwriting New Generation Investments program. The program is currently being designed by the Australian Government’s Department of Environment and Energy.\(^{185}\)

The program will provide financial support to facilitate the development of new firm generation capacity. It will be technology neutral and open to both ‘greenfield’ and ‘brownfield’ projects. The multi-phased program will be open over four years, until 2022–23.

The Australian Government called for Registrations of Interest for the program, which closed on 23 January 2019.\(^{186}\) Sixty-six proposals for coal, gas, and hydro schemes were received from industry.\(^{187}\) The Government intends to commence support for selected projects at the beginning of the 2019–20 financial year.

On 27 February 2019, the Australian Government committed to develop an underwriting mechanism for the Battery of the Nation project through its Underwriting New Generation Investments program.\(^{188}\) Battery of the Nation is a pumped hydro and renewables project proposed by Hydro Tasmania that would see significant additional generation capacity developed in Tasmania and linked to the mainland by a new interconnector between Tasmania and Victoria. More information is provided in section 4.3.2.

As set out in the REPI, the ACCC considers that the underwriting scheme will be most effective in reducing the impact of wholesale prices on consumers if:

1. the scheme facilitates new entrants into the wholesale market and does not further entrench the market position of established players
2. the level of underwriting from government is only sufficient to provide certainty for debt financing and does not underwrite equity
3. projects have commitments from customers to acquire energy from the project.\(^{189}\)

### 4.3.2 Snowy 2.0 and ‘Battery of the Nation’

Australian governments are currently considering two large pumped hydro developments that would add significant new storage capacity to the NEM. Pumped hydro is considered to be a good complement to intermittent renewable generation. The concept involves using energy when the price is low (such as overnight or when there is high penetration of wind and solar) to pump water uphill to reservoirs at the top of the hydro power station and then running the water through the hydro power station when prices are higher and/or when there are drop-offs in renewable generation. In essence, a pumped hydro facility can act as a substantial source of energy storage.

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Snowy 2.0

In March 2017, the Australian Government announced an expansion to the Snowy Hydro scheme, dubbed ‘Snowy 2.0’. The pumped storage project will provide 2000 MW of generation capacity. The first energy is expected to be produced by the Snowy upgrade in late 2024–25.

On 11 February 2019, the NSW Government announced approval for exploratory works to begin on the Snowy 2.0 project. Snowy Hydro will be submitting an Environmental Impact Statement later in 2019.

On 26 February 2019, the Australian Government approved plans for Snowy 2.0. The government will commit up to $1.38 billion in an equity investment, with the remainder of the project to be financed by Snowy Hydro Limited.

Considering the current tight supply demand balance in the NEM, particularly in periods of peak demand where renewable generation may be at low levels, more peak capacity should ease current supply issues. As coal-fired generators continue to exit the market to be replaced by more intermittent renewable generation, storage capacity will become more important in the market.

However, the ACCC considers that, should Snowy 2.0 go ahead, it could give rise to concerns regarding Snowy Hydro’s share of peaking generation. Based on future generation plans, Snowy Hydro would own upwards of 60 per cent of hydro and gas generation assets across NSW and Victoria, see figure 4.7 below.

Figure 4.7: Hydro and gas capacity in NSW and Victoria, including Snowy 2.0, with Snowy Hydro’s capacity identified specifically


The AER undertook more detailed analysis in its 2018 Wholesale Market Performance Monitoring Report (AER Wholesale Report 2018), assessing market concentration in ‘flexible’ generation. The AER’s analysis showed Snowy Hydro already has a very dominant position in Victoria and NSW (see figure 4.8).

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191 Snowy Hydro, Snowy 2.0 Project and business case overview, p. 8.


The ACCC recognises the need for new capacity in the NEM and the potential benefits of flexible capacity given the large volume of intermittent renewable generation forecast to enter in the near future. However, we note that concentration in particular generation types may result in sub-optimal market outcomes. The ACCC will continue to monitor the progress of the Snowy 2.0 scheme and, should it go ahead, monitor the impact on the wholesale and contracts markets. The ACCC also notes that Battery of the Nation would also provide significant new flexible generation capacity, which may mitigate any concerns that may arise regarding Snowy 2.0.

Battery of the Nation

In April 2017, the then Prime Minister and the Tasmanian Premier announced support for subsidies to boost Tasmania’s renewable energy generation.195 This project has been dubbed ‘Battery of the Nation’ and includes adding 2500 MW of pumped hydro in Tasmania and a second interconnector to the mainland.196 Along with pumped hydro, further interconnector capacity between Tasmania and mainland Australia has the potential to stimulate investment in Tasmania’s future wind resources that could be used to export power to the mainland.197

The interconnector component has been listed as part of a high priority initiative in the Infrastructure Priority List 2019.198 On 25 February 2019, the Australian Government committed $56 million towards

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197 Hydro Tasmania, Battery of the Nation—Unlocking Tasmania’s energy capacity, December 2018, p. 5.

198 Infrastructure Australia, Infrastructure Priority List—Australian Infrastructure Plan: project and initiative summaries, February 2019, p. 50.
a second Tasmania–mainland Australia interconnector. On 27 February 2019, the Tasmanian Government committed $30 million towards the Battery of the Nation project. In addition, the Australian Government has committed to develop an underwriting mechanism for the Battery of the Nation project through its Underwriting New Generation Investments program.

4.3.3 Retailer Reliability Obligation

A Retailer Reliability Obligation (RRO), initially proposed as an element of the National Energy Guarantee (NEG) by the ESB, is to commence by 1 July 2019. The RRO will require retailers to hold contracts or invest directly in dispatchable energy to ensure that sufficient generation is available to meet the needs of energy users. It represents a longterm solution to encourage investment in generation where it is most needed in the NEM.

In its December 2018 meeting, the COAG Energy Council agreed to the final draft bill of amendments to the National Electricity Law to give effect to the RRO. It will consider a final package of rules in the first half of 2019.

The RRO is intended to encourage further contracting between retailers and generators, which is likely to provide greater certainty for prospective generation investors and therefore encourage investment. The ACCC also supports the inclusion of a Market Liquidity Obligation, to ensure that contracts are made available to market participants in the event that the RRO is triggered. Without such a market-making obligation, standalone retailers may find it difficult to access the contracts they need in order to comply with the RRO.

4.3.4 Market-making obligations

As noted above, the ESB is continuing to work towards the implementation of the Market Liquidity Obligation as part of the RRO. Additionally a rule change request has been submitted to the AEMC by ENGIE for a tender for market-making obligations. The AEMC is considering a range of options for market-making on the basis of this proposal, including a compulsory market-making option along the lines of the REPI recommendation 7. The ACCC raised concerns about contract market liquidity in the REPI, especially in SA, and recommended the introduction of compulsory market-making obligations in SA.

Parallel to the ESB and the AEMC work, the ASX is in the process of developing a voluntary market-making scheme. The scheme would provide a rebate on a proportion of ASX fees to market participants that agree to undertake market-making on the ASX. The ACCC understands the ASX plans to have its scheme in place in the first half of 2019.

The ACCC has provided a public submission to the AEMC consultation on Engie’s rule change request expressing concerns about relying on voluntary market-making schemes and re-iterating concerns about the lack of contract market liquidity in SA that is likely impeding retail competition in the state.

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204 AEMC, Consultation paper—National electricity amendment (market-making arrangements in the NEM) rule 2019, 20 December 2018, p. 28.

205 ACCC, Submission to the AEMC market-making arrangements in the NEM, 7 February 2019, p. 1.
4.3.5 Establishment of CleanCo

The Queensland Government has announced its plans to establish CleanCo, a third state-owned generation portfolio that will have ownership or operational control of a mix of low- and no-emissions technology. CleanCo will have an initial generation portfolio of existing generation assets including Stanwell’s 385 MW gas-fired Swanbank E station, CS Energy’s 570 MW Wivenhoe pumped storage hydro plant, and some smaller hydro stations that were previously operated by Stanwell.206

The ACCC in the REPI raised strong concerns about the ability of Queensland’s two major state-owned generators, Stanwell and CS Energy, to influence wholesale market prices. Consequently, the ACCC recommended that the Queensland Government should divide its generation assets into three generation portfolios to reduce market concentration.

The ACCC’s recommendation in the REPI was for the Queensland Government to create three portfolios of similar size with a mix of generation assets in order to maximise competition. This contemplated the new third portfolio containing at least some coal assets.

While CleanCo takes a different approach to that contemplated by the ACCC in the REPI, the establishment of CleanCo is a positive step given the significant size of the portfolio and the presence of significant assets in Swanbank E and Wivenhoe. The ACCC will monitor the impact of this development given CleanCo is likely to be designated as a ‘State electricity entity’ and therefore subject to Queensland Government directions. We will also pay particular attention to whether CleanCo is successfully able to constrain the market power of Stanwell and CS Energy that has been evident in the past.

4.3.6 Prohibiting Energy Market Misconduct amendments

As mentioned in section 3.2.6, the Treasury Laws Amendment (Prohibiting Energy Market Misconduct) Bill 2018 would amend the CCA and introduce new provisions that prohibit certain conduct in the energy sector. Relevant to the wholesale market, two new prohibitions in the legislation broadly relate to financial contract market liquidity and conduct in wholesale spot markets. These provisions prohibit energy companies from withholding financial contracts for the purpose of substantially lessening competition, and prohibit generators manipulating the spot market, for example by withholding supply.

The Bill provides a range of administrative and court-ordered remedies (including public warning notices, infringement notices, and pecuniary penalties) that the ACCC can pursue for breach of the prohibited conduct and enables the ACCC to make a ‘prohibited conduct recommendation’ to the Treasurer, following which the Treasurer could:

- issue a written order to a corporation or another body to make offers to enter into electricity financial contracts with third-party entities (relating to the financial market liquidity prohibition).
- apply to the Federal Court for a divestiture order and for the court to make related orders that a corporation or another body corporate dispose of interests in securities or assets that are part of its electricity business (related to the wholesale spot market prohibition).

As noted in the section 3.2.6, the Australian Government has indicated an intention to take this policy to the upcoming federal election.

4.4 Intended framework for monitoring the wholesale market

The ACCC’s approach to monitoring the wholesale market will be largely informed by competition analysis, and whether there are inefficiencies or failures that are impeding competitive forces. The ACCC will also have regard to relevant legislative requirements on market participants, including bidding rules and any future legislative changes such as market-making obligations or amendments to the CCA noted in section 3.3.

However, an analysis of the wholesale market needs to have regard to the design of the NEM and how that design affects market outcomes and the behaviour of participants.

In this section we provide a summary of how the wholesale market is designed to operate, then briefly set out some key findings from the REPI and key submissions from stakeholders. We also provide guidance on areas our monitoring activities will focus on.

4.4.1 Design of the NEM

The NEM is an ‘energy-only’ market. This means that electricity generators are only paid based on the energy they produce. This market design differs from most energy markets around the world in which there is a separate capacity market or mechanism where generators earn revenue essentially for being available to produce power if needed. While capacity markets provide some assurance that sufficient capacity will be available to meet demand, they can also be costly. For example, Western Australia’s South West Interconnected System (SWIS) has a capacity market, which has consistently resulted in excess capacity and greater costs to WA consumers.207

The NEM is designed to arrive at the ‘efficient’ price for the supply of wholesale electricity. Customer demand and generation supply are matched in real time by AEMO, with generators utilised in the order of least expensive to most expensive. In theory, this process results in an efficient spot price that will just cover the marginal generator’s fuel and operating costs for producing the electricity. These costs are referred to as short-run marginal costs (SRMC). However, generation technologies also have large upfront capital costs involved in building the plant and these costs must be recovered or there would be no incentive to invest in the NEM. For these costs to be recovered, generators rely on occasional high price events. In this sense, high-price events are a normal and important element of the NEM.

In the longer term, sustained high prices signal to investors to build more generation capacity so as to earn a return from high prices.

While generators rely on high price events to recover fixed costs, in a competitive energy-only market, it is actually in their interests to bid at their SRMC as this maximises the potential for dispatch. After making their initial bids, market participants can rebid to reflect changes in their circumstances at any time, called rebidding. There are many reasons a market participant may consider making a rebid, such as changes in demand forecast or changes in the output of variable generation such as wind.

Strategic rebidding has been the subject of regulatory investigation in the past, with concerns centred on the potential for large generators to use rebidding to inflate prices. Revised rebidding rules were introduced in July 2016. The revised rules strengthened the requirement for generators to have a genuine intent to honour their bids by prohibiting the submission of offers, bids and rebids that are false, misleading or are likely to mislead.208

While the energy-only design of the NEM means (when working well) the market should deliver efficient prices, it is a design that is vulnerable to the exercise of market power. In particular:

- The market price cap ($14 500/MWh) is very high. This helps provide incentives for investment but also means short-term exercises of market power can be very profitable.
- Demand for electricity is largely insensitive to the wholesale price in the short run, so spikes in price do not elicit reductions in demand that would help reduce prices.
- The capacity to generate is fixed in the short run. Generators typically have limited scope to increase output when the wholesale price is high. As a result, as demand approaches the maximum capacity of the system to supply, the supply curve becomes very steep.

207 Department of Treasury (Western Australia), Improving Reserve Capacity pricing signals—a proposed capacity pricing model—Draft Recommendations Report, 22 August 2018, p. 9.
208 On 10 December 2015, the AEMC made a final rule to enhance the arrangements that govern generator’s offers in the wholesale electricity market. Amendments were made to the National Electricity Rules, including the current requirement that offers be made in good faith be replaced by a prohibition against making false or misleading offers, any variations to offers will need to be made as soon as practicable, and a requirement to preserve a contemporaneous record of the circumstances surrounding late rebids will be introduced. See: https://www.aemc.gov.au/rule-changes/bidding-in-good-faith.
Binding transmission constraints can limit the size of the area over which generators can compete with each other, giving rise to the scope for localised market power.

Generators interact with each other repeatedly in the dispatch process, potentially allowing them to establish implicit or tacit cooperation or collusive arrangements.

To mitigate their exposure to price volatility in the wholesale market, retailers and generators typically enter into financial contracts that ‘hedge’ wholesale prices. These contracts may be entered into with intermediaries (or traded a number of times amongst market participants), though in general, generators are the natural sellers of such contracts and retailers the natural buyers. Contracts provide retailers with a consistent price for wholesale electricity, allowing them to offer longer-term and stable retail prices with consumers. For generators, contracts provide a steadier, more guaranteed, stream of income which enables them to obtain financing for new investment.

4.4.2 The REPI and AER wholesale market findings

The ACCC in the REPI, and the AER in its Wholesale Report 2018 report have both undertaken significant recent analyses of the wholesale market. Both the ACCC and the AER identified that the wholesale market is in a state of change, transitioning away from traditional fuel sources such as coal and towards more renewable sources such as wind and solar. Generation from renewable resources has been rising rapidly in recent years, and accounted for over ten per cent of total output in the NEM in 2017–18. Around 5300 MW of new wind and solar capacity has entered the market since 2014–15. In addition, there is significant investment in renewable generation on the horizon. There are 13 wind projects (nearly 2500 megawatts) expected to be commissioned in the NEM by the end of the 2019–20 financial year.

Despite the sizeable investment in renewable generation, it has not compensated for the primarily coal generation that has left the market. Further, the intermittent nature of renewables has meant that sometimes they are not operating at times of high demand, further exacerbating the tightening supply-demand balance.

In 2017–18, the wholesale market experienced sustained high average prices, with the almost complete disappearance of spot prices below $50/MWh and a growth in the instances of prices between $50–200/MWh. This was in contrast with historical drivers of high average prices in the NEM, in which a limited number of extreme price events were a major driver for high average prices. As large coal generators exit, higher cost generators are more often being dispatched, increasing overall prices. In addition, the ACCC found in the REPI that an increase in the costs of coal and gas further increased the cost of some coal and gas generators, which was reflected in higher-priced bids into the NEM.

However, the ACCC also identified in the REPI that the increase in underlying wholesale prices may have been influenced by generator behaviour. Analysis in the REPI showed bidding behaviour by a number of significant generators between 2015 and 2017 changed, such that their bids were generally higher than in the past, and that this was a key contributor to the higher average prices across recent years. The AER noted that bidding behaviour has been the largest contributor to high price events in the NEM over the past six years, though has been less of a concern since 2016. The ACCC and AER also found that the increase in fuel costs do not fully account for all of the increase in offer prices, particularly among black coal generators in NSW and Queensland.

The ACCC noted in the REPI that the NEM has historically seen prices act as appropriate signals for investment or plant exit. However, if investment to bring prices down does not occur, it may indicate that there are significant barriers to entry which pose a risk to the competitive nature of the wholesale market. We noted in the REPI a number of potential barriers to entry in the wholesale market that may be discouraging new generation entering the system, including uncertainty over government policy, regulatory approvals for construction, financing limitations, input fuel prices, obligations to

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213 ACCC, Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final Report, June 2018, p. 41.
meet AEMO requirements, environmental regulations and safety requirements.\textsuperscript{214} The AER identified that market concentration, vertical integration, government ownership, contract market liquidity and market interventions such as the RERT mechanism may cause barriers to entry into the NEM. However, modelling undertaken by the AER suggests that for some technologies, a potential price signal for new entry is emerging, with emerging signals for entry in wind, large scale solar photovoltaic (PV) and combined cycle gas turbine technologies.\textsuperscript{215}

It was noted in both the REPI and the AER \textit{Wholesale Report 2018} that significant new investment is coming into the NEM (see figure 4.9). With approximately 8000 MW of committed investment in generation expected to come online in 2019 and 2020, the NEM is going through a significant build phase. Other significant projects, such as Snowy 2.0, would add further capacity. Such significant committed investment in generation indicates that there may not be an investment shortage for new generation in the NEM. In both reports, however, it was noted that the new investment is largely in intermittent generating units in solar and wind, as opposed to the firm capacity that has exited the market over the last few years.

\begin{figure}
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\caption{New and committed investment and withdrawn capacity in the NEM}
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\caption{New and committed investment and withdrawn capacity in the NEM}
\end{figure}

The ACCC found in the REPI that concentration was impeding efficient functioning of the wholesale market. In particular, the REPI found that NSW black coal-fired generators were behaving in a relatively unconstrained way in the market, resulting in increased prices. As discussed above at 4.3.5 the REPI also raised concerns about the level of market concentration in Queensland, with the state-owned Stanwell and CS Energy comprising well over half the generation capacity in the region. The ACCC noted in the REPI that the bidding behaviour of Stanwell changed following an instruction from the Queensland Government which had the effect of significantly reducing wholesale prices in the region.\textsuperscript{216} While the reduction in prices from very high levels is positive, the impact of a change in behaviour by a single participant demonstrated the apparent market power of these very large generators. Further, a structural solution to such a problem (creating a third generation portfolio) is preferred over a behavioural one (a direction from the government owner), as noted in section 4.3.5.

\begin{itemize}
\item \textsuperscript{214} ACCC, \textit{Restoring electricity affordability and Australia’s competitive advantage}, Retail Electricity Pricing Inquiry—Final Report, June 2018, p. 98.
\item \textsuperscript{216} ACCC, \textit{Restoring electricity affordability and Australia’s competitive advantage}, Retail Electricity Pricing Inquiry—Final Report, June 2018, p. 85.
\end{itemize}
These findings informed a number of the REPI recommendations targeting wholesale prices, including a restriction on companies acquiring generation assets which would result in their market share being above 20 per cent. As noted in section 4.3, progress has been made on wholesale market recommendations relating to the composition and ownership of generation assets in Queensland, government underwriting of new generation capacity, and enhanced regulatory powers to monitor market participant behaviour.

4.4.3 Submissions to the Discussion Paper

Submissions to our Discussion Paper included a number of views on issues in the wholesale market and how we should go about our monitoring.

Origin emphasised that price fluctuations and volatility are consistent with the cyclical nature of the market and are not necessarily an indication of a market which is not functioning properly. Snowy Hydro and Origin noted that exercises of market power will only be transient due to the threat of new entry. Origin also noted that sustained high prices above LRMC could indicate an issue with the market, either market power or barriers to entry which are discouraging investment.

Snowy Hydro raised the nature of investment necessitating high sunk costs as a natural barrier to entry. It submitted that this is decreasingly the case as smaller units of renewable energy offer a lower sunk cost option to enter the market. Several stakeholders pointed to the continued policy uncertainty surrounding emission reduction policy along with other regulation as a barrier to entry as possible investors delay investment pending policy outcomes. Several retailers suggested we monitor the effect of the ongoing policy uncertainty on the market. Origin submitted that prices are not the only incentive to invest or leave the market as technology risk represents a barrier to entry while remediation costs can pose a barrier to exit.

Due to the long-run pricing nature of the energy-only market, Origin emphasised that margins should be viewed in a long time series rather than a point in time measure. It submitted that viewing profits in a short period could give an erroneous representation of the profitability of businesses. The AEC advised that margins should be viewed at an industry wide level rather than individual businesses as margins of individual business do not reveal anything intrinsic about the industry.

223 Technology risk represents the situation where you invest in a particular technology which becomes obsolete before you have realised your returns. Plants require remediation after their closure. This has been particularly relevant in recent years with large coal fired power stations with attached mines closing and needing to remediate the site. (See: Origin Energy, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 4)
Several retailers suggested we monitor policy and technology changes which may affect the wholesale market. These included any introduction of government underwritten generation, the effect of policy uncertainty especially in regards to emission reductions and how the increase in near-zero SRMC renewable generation technology, and the associated depression in wholesale prices, are impacting investment in dispatchable generation.

ERM Power raised concern about the level of concentration in the wholesale market and the effect of vertically integrated generators. ERM Power is concerned these factors will worsen with the tightening supply demand balance, fuel shortages and the exit of large coal-fired generators. As such, it submitted that we should monitor compliance with the ‘good faith bidding rule’ of the NER.

Retailers AGL and ERM Power pointed to the need to analyse the effect of the upcoming five-minute settlement rule change.

Several stakeholders including retailers and industry groups emphasised that measuring the relationship between wholesale and retail prices will be a complex and difficult task. They considered that this is due to several reasons including:

- wholesale costs represent only one of several elements which affect retail prices
- due to spot market volatility, most retailers and generators use the contract market to hedge their risk. For retailers, contracts can minimise exposure to high spot prices while for generators, contracts provide insulation from risk of low wholesale prices which do not cover their fixed costs. This hedging complicates the relationship between wholesale and retail costs as price changes may not be passed through until the next contract date
- companies will have different appetites for risk and such differing exposure to pool prices as well as different structure, terms and duration of hedging contracts
- risk will vary between regions and will be accompanied by differing hedging approaches
- customer acquisition strategies will also vary the relationship between wholesale and retail prices between retailers. Some retailers may be prepared to absorb increased costs from wholesale price increases in order to compete more effectively in the market
- vertically integrated retailers will have different ‘transfer prices’ between their wholesale and retail arms
- new regulations, the increasing uptake of solar and batteries and the difficulties of a transforming wholesale market will make this relationship even more difficult to analyse.

In particular, Origin submitted that it has significant concerns around the ACCC’s plan to monitor whether any wholesale cost savings are being passed through in retail prices as the focus on wholesale costs in this manner could undermine market competitiveness, increase uncertainty, and lead to a range of unintended consequences. Origin also noted that a focus on cost pass-through is likely to remove the commercial incentive to accept risk and invest in measures that reduce supply costs.

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noted that there is no established methodology for carrying out such analysis, and invariably it will have a short-term focus, which is likely to lead to erroneous conclusions. Origin argued that as the ACCC is seeking to form a view on a retailer’s wholesale costs at a particular point in time, this ignores the cyclical nature of markets and the need to take a long-term view.\textsuperscript{231}

In regards to the relationship between wholesale and retail prices, AGL submitted that retailers use different strategies to manage the risk of the wholesale market, including vertical integration, hedging, or purchasing on the spot market. It noted that approaches carry a differing degree of risk dependent on market conditions, which impact the wholesale price.\textsuperscript{232}

Alinta submitted that in assessing the relationship between wholesale and retail prices over time, whilst wholesale prices are a key contributor to the end retail cost, other pricing factors (network costs, environmental scheme costs etc.) will continue to influence end pricing to consumers. Like Origin, Alinta contended that the methodology of measuring any relationship between wholesale costs and retail pricing will be both difficult and complex. Alinta noted that this relationship is underpinned by a retailer’s risk strategy in managing their exposure to the volatility in wholesale costs and as a result, the relationship between wholesale and retail costs will vary greatly between retailers and across regions. Additionally, individual customer acquisition strategies can impact that relationship, where a retailer is prepared to absorb a proportion of the wholesale cost for a potential reward of being more competitive in the market and as a result have a greater ability to acquire customers.\textsuperscript{233}

EnergyAustralia submitted that monitoring wholesale costs and transfer pricing for vertically integrated businesses poses a challenge for the ACCC, noting that ACCC analysis and findings must accommodate the different strategies and capabilities of each business.\textsuperscript{234}

Beovista noted that the time it takes for changes in underlying costs to be passed onto consumers is a good measure to track, especially when price reductions are happening in the wholesale market. However, Beovista also noted that hedging contracts can mask the timing impact of pricing being passed to consumers. Additionally, Beovista adds that ‘price changes may not be passed on to consumers until their next contract review date, masking further the immediate impact of wholesale market changes’.\textsuperscript{235}

Similarly to the above, Meridan Energy also submitted that the relationship between wholesale costs and retail prices is extremely complex and difficult. It suggested to:

- consider utilising data concerning the actual costs of all elements of the wholesale costs that underlie retail customer loads, taking into account varying customer load profiles and the costs of products for managing the exposure to and volatility of these differing load profiles. Further, that data concerning the depth of relevant markets may also be useful if it can be obtained efficiently and to a sufficiently quantitative and qualitative form
- assess appropriate data sources in relation to the hedging of capacity risk via the ASX and OTC markets. In addition, the ACCC should endeavour to source market data on load-following hedge contracts to provide arm’s length data points on relatively ‘risk-free’ hedging strategies
- note that the prevalence of rooftop solar and batteries forms an integral and increasingly larger proportion of a retailer’s wholesale portfolio. Understanding this generation source and profile will become more important in the future.\textsuperscript{236}

The AEC also contended that the relationship between wholesale and retail prices will be difficult to measure. A wide range of factors influence retailers’ pricing decisions and the wholesale price

\textsuperscript{231} Origin Energy, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 5.
\textsuperscript{232} AGL Energy, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 20 December 2018, p. 10.
\textsuperscript{233} Alinta Energy, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 4.
\textsuperscript{234} Energy Australia, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 4.
\textsuperscript{235} Beovista, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 5.
\textsuperscript{236} Meridian Energy, Submission to the ACCC Discussion Paper for inquiry into electricity supply in Australia, 19 December 2018, p. 2.
represents only part of that equation. The AEC cautioned against an analysis that attempts to draw out a direct correlation which may not be able to factor in the full commercial reality of retail pricing decisions. The AEC submitted this analysis is made more complex as a result of the industry changes underway. In particular, it submitted that the attraction of customers to behind-the-meter generation further complicates the connection of wholesale to retail prices.237

4.4.4 Monitoring measures of the wholesale market

There are a broad range of wholesale market monitoring activities that we will undertake. However, as noted in several retailer submissions, there are a number of existing wholesale market monitoring activities already being undertaken by other agencies. Most notable is the AER’s reporting on wholesale electricity market monitoring. As set out in section 2, we do not intend to duplicate analysis and data collection undertaken by the AER and will instead draw on the AER’s work where relevant.

We will also have regard to other publicly available monitoring activities, such as AEMO’s Quarterly Energy Dynamics reports and other wholesale market monitoring. The significant volume of publicly-available information, monitoring, and analysis already reported on the wholesale market will form the background for our further analysis and investigations.

Where necessary, we will use our information-gathering powers to investigate particular issues in greater detail. Some of the wholesale-related issues we are required to monitor will also be informed by the continuation of our collection of retailer cost data.

Prices

The key market outcome in the wholesale market is the prices paid for wholesale electricity in each region. We will monitor spot market prices over the course of the inquiry, as well as the prices and trends in ancillary markets such as Frequency Control Ancillary Services (FCAS). Such monitoring will assist to both identify emerging issues in the wholesale market and observe the impact of developments in the market. As noted in submissions, price fluctuations and volatility are to be expected in an energy only market such as the NEM. The ACCC will consider prices in relation to long-term trends and the relevant market conditions.

Wholesale spot market data is available from AEMO and other public sources and this will be the key data source for much of the ACCC’s wholesale electricity price monitoring activities.

In regards to the FCAS markets, the AER already performs a reporting role through its Electricity Weekly reports, ancillary services costs data statistics and more recently through its Wholesale Report 2018.238 The AER has recently observed that the cost of FCAS has increased from less than 0.5 per cent (of NEM energy costs) to 3 per cent over the last five years.239 In July 2018, the AEMC published its Frequency Control Frameworks Review—Final Report, which recommended the AER undertake a more formal role in the FCAS markets.240 The AER has recently submitted a rule change request to the AEMC for it to take a more formal role.241 We will continue to follow the progress of this rule change and endeavour to integrate our monitoring approach of the FCAS markets with the AER.

Market characteristics

The wholesale market is dynamic and is in a period of transition. Market characteristics are likely to change significantly over the course of the inquiry and will need to be carefully monitored to observe the impact of these changes and to understand emerging issues. The ACCC will monitor a number of market characteristics, including:

- Market share: we found in the REPI that the wholesale market was concentrated and that this concentration had recently increased. Due to the energy-only market design of the NEM.

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238 AER, AER reporting on FCAS market outcomes—rule change request, February 2019, p. 4.
competition in bidding among rival generators is critical to drive efficient prices. As such, we will be monitoring any changes in market share based on publicly-available AEMO data.

- Developments in new generation: The tight supply-demand balance which currently exists in the NEM means new generation should be entering the market to take advantage of higher prices. We will be monitoring new generation coming into the NEM and analysing their effects on the market.

- Trends in fuel types: The NEM is transitioning away from fossil fuel generation to more intermittent renewables. This change in the nature of generation will have an effect on the way the market functions. In submissions, several retailers raised changes in generation technology as an ongoing risk. We will monitor the change in fuel types and any resulting effects on prices, bidding behaviour and other market characteristics.

- Wholesale margins: Generators have experienced enhanced profitability due to higher than average wholesale prices. Submissions suggested that profits be analysed in a long-time series and at an industry-wide level. As profitability is an important indicator of the functioning of the market the ACCC will continue to analyse profits from generators but will do so considering long-term industry trends.

- Vertical integration: There is considerable vertical integration between wholesalers and retailers in the NEM. Vertical integration has impacts on competition in both the wholesale and retail sectors, and the ACCC will monitor the prevalence of vertical integration in the NEM and the impact it has on each market segment. Should the ACCC identify issues relating to vertical integration, we may undertake further analysis and investigation to better understand the impact vertical integration is having on competition.

**Wholesale electricity costs experienced by retailers**

The analysis undertaken in the REPI showed that wholesale electricity costs were the second largest contributor to consumers’ electricity bills, making up 34 per cent of the average bill across the NEM in 2017–18. This information was obtained from retailers and reflected their actual wholesale electricity costs for each year.

We consider that this analysis will be an important component of future monitoring activities. Continuing to observe actual electricity costs experienced by retailers will allow the ACCC to accurately assess the impact of the wholesale market on the prices faced by consumers over time and as changes to the wholesale market take effect. Such analysis will also allow us to better observe the relationship between retailers’ experience of wholesale costs and prices in the spot and contract markets.

As in the REPI, this information will be obtained through our compulsory information-gathering powers.

**Contract market**

Contracts are traded on the ASX as well as the over-the-counter (OTC) market. Anonymised trading data is available from the ASX, which can be used to analyse market activity, liquidity, and price trends. The OTC market is largely opaque, though Australian Financial Markets Authority (AFMA) publishes a survey each year of aggregated OTC market activity, which allows for general market activity trends.

In the REPI, the ACCC obtained internal trading data from market participants that allowed for an in-depth analysis of activity in the OTC market. The ACCC remains of the view, as expressed in the REPI, that the lack of data on the OTC market impairs the effective functioning of both the wholesale and retail market.

However, the ACCC notes that there are a number of potential changes to contracts markets currently being considered by government and regulators, including:

- the creation of a trade repository for OTC trades to be administered by the AER

- an extension of the AER’s wholesale market performance monitoring activities to include contract market activities

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various forms of market-making obligations.

We consider that, in the current situation, it would be premature to commit to particular contract market monitoring activities. We will be engaging with these reform processes and will refine our approach to contract market monitoring as policy settings become clearer.

However, it is likely that the contracting activities of market participants will be required to inform other pieces of analysis during the inquiry, such as the relationship between wholesale and retail prices, and whether vertically integrated suppliers are restricting competition and new entry. In such circumstances, we will use compulsory information-gathering powers to obtain the necessary information.

**Input costs**

Input costs can be a significant influence on wholesale prices. Analysis undertaken in the REPI and also by the AER showed that increases in the cost of gas and black coal contributed to the high wholesale prices of recent years. Several submissions also noted the pressure of increasing fuel costs which are reflected in generator’s bids.

In the REPI, the ACCC sourced public black coal price information relating to the Newcastle ‘Free on Board’ index compiled by Indexmundi. The ACCC also collected internal generator data on coal and gas fuel costs. The ACCC undertook analysis to compare changes in bidding behaviour to changes in coal costs, as well as commissioning a consultant analysis on the impact of gas prices on wholesale electricity prices in SA.


The ACCC and AER have also previously assessed the approach that hydro generators take to water. While hydro plants do not have an explicit price for the water they use, generators have limited storage levels and have to manage their water appropriately. The decisions facing hydro generators are complicated and involve the ‘opportunity cost’ of using their water at any given time. In the REPI, the ACCC raised concerns that Snowy Hydro’s approach to managing water may limit the degree to which Snowy Hydro acts as a constraint on other generators’ bidding behaviour.

The ACCC will continue to monitor fuel input prices and the degree to which they are influencing wholesale prices. Given that the AER will also be considering these issues in its wholesale market monitoring, we will work together to establish a consistent approach. Where necessary we will use information gathering powers to understand better the decisions being made by generators with regards to fuel inputs and costs of supply.

**How wholesale prices are influencing retail prices**

The ACCC acknowledges the challenges identified by some stakeholders, particularly retailers, in establishing a relationship between wholesale costs and retail prices. However, we also note that a number of submissions received in response to our Discussion Paper supported the ‘cost-stack’ type analysis we undertook in the REPI and supported the continuation of this approach (see section 3.3.4). We note that this approach appears to deal with many of the concerns raised by retailers because the data collected for this task is sourced directly from retailers and is based on the costs retailers face in procuring wholesale electricity. That is, this measure has regard to the position a retailer takes in the contract market, any (notional) cost of self-supply through vertical integration and any exposure to the spot market.

It appears many of the concerns of retailers in undertaking an examination of the relationship between wholesale costs and retail prices relate to:

- the fact that different retailers have different circumstances (e.g. risk appetite, access to self-supply, etc.)

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- timing issues—for example the potential significant lag between purchase of hedge contracts and when retail prices are determined.

The ACCC acknowledges that these are relevant considerations for analysis and conclusions that can be drawn from comparisons of wholesale costs and retail prices. However, these are not insurmountable obstacles to the collection or analysis of relevant data. For example, the ACCC expects to have regard to submissions and other material from retailers which will help explain the individual circumstances of the retailer and why movements in retail prices have or have not followed wholesale costs as one might expect.

The ACCC’s approach to monitoring how wholesale prices are influencing retail prices will initially be based on the cost stack information obtained from retailers. This data source will allow for wholesale costs to be compared to retail prices while taking into account all other relevant cost factors that might also be influencing prices.

Where necessary, the ACCC may also use other sources of information to inform this analysis, such as:

- public information on retail prices and wholesale prices
- public information on contract market prices to inform a model of a retailer’s wholesale costs
- information from market participants regarding their approach to retail pricing and the influence of wholesale prices.

**The impact of policy changes on wholesale market prices**

As set out in section 4.3, there are a number of significant policy changes underway in the wholesale market. Governments are bringing significant new generation capacity into the market, rules designed to influence the behaviour of generation companies are prominent political issues, and the RRO will commence later this year. Other changes, such as five-minute settlement will take effect over the course of the ACCC’s inquiry.

A number of submissions noted we should monitor the impact of policy changes on market outcomes, which the ACCC agrees is an important element of our monitoring work. Numerous submissions also pointed to the ongoing policy uncertainty regarding carbon emissions reductions as having a significant impact on investment in the market.

A number of recommendations from the REPI regarding wholesale markets may also come into effect during the ACCC’s inquiry, such as:

- capping the wholesale market share that can be achieved through acquisition at 20 per cent (recommendation 1)
- enacting a stable carbon emissions reduction policy to provide certainty to market participants (recommendation 5).

As in this report, the ACCC will update on progress on the implementation of the REPI recommendations, and will monitor the impact of these changes as they come into effect. We will also remain engaged in relevant policy debates and may include analysis of specific policy issues in our reporting from time to time.

**Issues for further analysis and investigation**

The ACCC will undertake deeper analysis and investigations into specific issues, to complement its ongoing monitoring activities. Some of these potential investigations are noted in the monitoring activities above, and may be undertaken should monitoring reveal potential issues.

Some issues that fall within the scope of our Terms of References are unlikely to be effectively monitored through simple metrics, and so are not likely to be included in our regular monitoring reports. These topics will be investigated separately.
The types of issues that we investigate will evolve over the course of the inquiry. The ACCC will respond to issues as they emerge, and may release targeted reports dealing with specific issues in the wholesale market. While it is not possible to set out these topics in advance, we have included three broad issues that we will likely focus some of our investigative work on during the inquiry:

- barriers to entry
- market power
- bidding behaviour.

Some further detail on each of these matters is included below.

**Barriers to entry**

The key to the efficient operation of an energy only market like the NEM is that there are limited barriers to entry or exit so inefficiently high or low prices cannot be sustained in the long term. Considering the tight supply-demand balance the NEM is experiencing new investment should enter the market. If this does not appear to be occurring in a reasonable time frame then high barriers to entry possibly exist in the NEM.

The AER considered a variety of potential barriers to entry in its Wholesale Report 2018, including:

- market concentration, vertical integration, and contract market liquidity
- policy uncertainty
- government ownership and investment
- the RERT.

Other potential barriers raised in submissions include technology uncertainty, capital costs, and regulatory burden.

The AER has also published levelised cost of energy analysis, which models the financial prospects for different types of generation entering the NEM. This work helps provide some understanding of whether market conditions are conducive to new entry.

We are not proposing at this stage to report on regular metrics relating to barriers to entry, but will publish the results of our analysis from time to time. Should we develop appropriate metrics in future, they may become part of our ongoing monitoring.

**Market power**

A number of concerns have been raised about market power in the NEM, including in the REPI. As noted earlier in this section, the wholesale market is increasingly concentrated, wholesale prices have increased significantly in recent years, and generator profits are high. The NEM is designed to allow these circumstances to arise, with the expectation that they will induce a competitive response from new entrants. Submissions noted that instances of market power in the NEM will only be transitory due to the threat of new entry. If however there are barriers to entry, it is possible that market power may be sustained which will impact on the competitive functioning of the wholesale market. As such the ACCC will be monitoring possible instances of market power as set out below.

The AER’s Wholesale Report 2018 sets out a number of ways in which participants exercise market power in the NEM:

- reducing the amount of capacity offered to the market (physical withholding)
- raising the price of output above marginal cost (economic withholding)
- rebidding capacity from low to high prices close to dispatch
- minimising the rate at which a generator can be ramped down, thereby displacing lower cost generation from being dispatched.

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The AER concluded that market participants are exercising market power from time to time, but not on a sustained basis. The AER did, however, identify a number of longer-term trends that it intends to monitor, including the behaviour of large generators in Queensland.

Given the complexity in assessing market power in the wholesale market, the ACCC does not intend at this stage to include any specific market power metrics in its regular reports, but will publish the results of its analysis from time to time.

**Bidding behaviour by participants**

As noted above, a number of concerns have been raised, including in submissions, about the ability of large generators to influence market prices through their bidding. The AER notes that rebidding behaviour in Queensland was a particular concern between 2013 and 2016, though it has been less of an issue since. Nevertheless, rebidding was identified as the largest contributor to high price events in the NEM since 2013, accounting for 30 per cent of price spikes.

The issue of bidding behaviour was again put in the spotlight by the Grattan Institute’s July 2018 report *Mostly working: Australia’s wholesale electricity market*, which concluded that rebidding was a contributing factor to around $800 million of unnecessary price increases. The AEMC and AER undertook an analysis of the Grattan Institute’s estimates and concluded that the contribution of rebidding was, in fact, much smaller. The report also considered a variety of design changes proposed by the Grattan Institute, including a ‘gate closure’ mechanism that would limit the ability of generators to make last minute rebids.

The ACCC will monitor bidding behaviour, including rebidding, to determine the impact of this behaviour on prices. Given that bidding behaviour, and its impact on wholesale prices, can be complicated, we do not intend to regularly report on bidding behaviour metrics, though we will update statistics on the contribution of bidding behaviour to high price events where relevant. We will publish our analysis on bidding behaviour from time to time.

Table 4.1 below summarises what we have outlined in this section as the likely kinds of measures and indicators we expect to use to inform our analysis.

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<table>
<thead>
<tr>
<th>Topic</th>
<th>What we are likely to monitor</th>
<th>Likely data sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale electricity prices</td>
<td>Trends in spot prices across the NEM</td>
<td>AEMO data, AER and AEMO analysis, and other public sources</td>
</tr>
<tr>
<td></td>
<td>Bidding and rebidding behaviour</td>
<td>AEMO data. ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td>Market characteristics</td>
<td>Market share by capacity and generation produced</td>
<td>AEMO data</td>
</tr>
<tr>
<td></td>
<td>Generator entry and exit</td>
<td>AEMO data, AER analysis</td>
</tr>
<tr>
<td></td>
<td>Generation technology mix in the NEM</td>
<td>AEMO data, AER analysis</td>
</tr>
<tr>
<td></td>
<td>Vertical integration and transfer pricing</td>
<td>AEMO and AER data and analysis. ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Wholesale margins</td>
<td>Public financial accounts and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td>Wholesale electricity costs experienced by retailers</td>
<td>Wholesale costs incurred by retailers in the supply of customers, by customer type, over various time periods.</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td>Contract market (to be determined in more detail, when greater clarity over AER monitoring role is available)</td>
<td>Traded volumes</td>
<td>ASX data. ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Contract market prices</td>
<td>ASX data. ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Trading activity undertaken by market participants</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td>Input costs</td>
<td>Trends in costs of coal and gas, and hydro water storage levels</td>
<td>Public data and analysis from AER. ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Relevant bidding behaviour and wholesale prices</td>
<td>AEMO. ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td>How wholesale prices are influencing retail prices</td>
<td>Cost components that make up retailer bills</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>Information from retailers regarding their approach to setting retail prices</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>Retail and wholesale prices</td>
<td>AEMO, AER, and other public sources</td>
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<tr>
<td></td>
<td>Contract market prices</td>
<td>ASX, ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td>The impact of policy changes on wholesale market prices</td>
<td>Progress of the wholesale REPI recommendations</td>
<td>Public information and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Analysis of specific policy issues (other than REPI) from time to time</td>
<td></td>
</tr>
<tr>
<td>Issues for further analysis and investigation</td>
<td>Barriers to entry</td>
<td>AER analysis, including LCOE modelling. ACCC information gathering powers where necessary</td>
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<tr>
<td></td>
<td>Bidding behaviour</td>
<td>AEMO data and AER analysis. ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Market power</td>
<td>AER analysis and ACCC information gathering powers where necessary</td>
</tr>
</tbody>
</table>
5. **Network costs**

Electricity network service providers (NSPs) which carry electricity from generators to customers are capital intensive entities, comprising large high-value physical asset bases. Like most utilities, they are also characterised by declining average costs as network utilisation increases. These economies of scale create a barrier to entry for prospective network competitors. It is cheaper for a single provider to supply network services across an entire geographical area.

While a natural monopoly market structure avoids the costly and inefficient duplication of infrastructure such as transformers, poles and wires, in the absence of competition, a single NSP would not necessarily act completely in the long-term interest of electricity users. Regulation is necessary, therefore, to prevent over-charging, ensure service quality is maintained and encourage efficient levels of investment and network maintenance.

The Australian Energy Regulator regulates electricity networks in all NEM jurisdictions.

5.1 **Relevant Terms of Reference**

The Terms of Reference of the inquiry specifically require the ACCC to monitor the electricity prices faced by retail customers in the NEM. The contribution of network costs to those prices needs to be considered given the significance of network costs in a retailer’s overall costs (43 per cent).\(^{249}\)

5.2 **Updates on network costs**

In the following section, we provide an update since our final REPI report on network costs, using publicly available information.

5.2.1 **Annual price changes**

Since the REPI concluded in June 2018, all distribution network service providers (DNSPs) have revised their network charges. The indicative impact of these changes on an average residential customer retail bill is set out in table 5.1 below.

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Table 5.1: Indicative annual impact of recent network price changes on average residential retail bills

<table>
<thead>
<tr>
<th>DNOSP</th>
<th>Effective date</th>
<th>Average residential impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$ p.a.</td>
</tr>
<tr>
<td>Evoenergy</td>
<td>July 2018</td>
<td>17</td>
</tr>
<tr>
<td>Essential Energy</td>
<td>July 2018</td>
<td>19</td>
</tr>
<tr>
<td>Endeavour Energy</td>
<td>July 2018</td>
<td>-3</td>
</tr>
<tr>
<td>Ausgrid</td>
<td>July 2018</td>
<td>-4</td>
</tr>
<tr>
<td>TasNetworks</td>
<td>July 2018</td>
<td>-30</td>
</tr>
<tr>
<td>Ergon Energy</td>
<td>July 2018</td>
<td>-34</td>
</tr>
<tr>
<td>ENERGEX</td>
<td>July 2018</td>
<td>-40</td>
</tr>
<tr>
<td>SA Power</td>
<td>July 2018</td>
<td>60</td>
</tr>
<tr>
<td>Jemena</td>
<td>Jan 2019</td>
<td>0</td>
</tr>
<tr>
<td>Powercor</td>
<td>Jan 2019</td>
<td>16</td>
</tr>
<tr>
<td>United Energy</td>
<td>Jan 2019</td>
<td>11</td>
</tr>
<tr>
<td>AusNet</td>
<td>Jan 2019</td>
<td>30</td>
</tr>
<tr>
<td>Citipower</td>
<td>Jan 2019</td>
<td>14</td>
</tr>
</tbody>
</table>

Source: AER, Annual Distribution Pricing Proposals.
Note: Network Use of System Charges (NUOS), exclusive of the impact of jurisdictional schemes.

The table shows that average network costs declined in a number of distribution areas, while network cost growth was relatively low in most of the remaining areas.

5.2.2 Regulatory price determinations

The AER has released a number of Draft Decisions on revenue determinations since 1 July 2018. Those decisions, along with estimated impacts on average customer bills are identified below.

TasNetworks—Draft Decision on electricity distribution and transmission networks in Tasmania for the five years commencing 1 July 2019

- The average annual residential bill is expected to be 0.6 per cent lower in the first year.
- The overall impact for an average residential customer is estimated to be a nominal $80 increase (4.2 per cent) over the five-year regulatory period.
- For small business customers, the overall impact is a $254 increase over the five-year period, on average.250

Evoenergy—Draft Decision for the ACT’s distribution network service provider for the five years commencing 1 July 2019

- The Decision allows for a 4.2 per cent real reduction in total allowed revenue compared with the current regulatory period.
- The annual electricity bill for an average residential customer is expected to be 0.2 per cent ($3) higher in the first year.
- Over the five-year period, the overall impact for an average residential customer is estimated to be a $61 increase in electricity bills.
- For small business customers, a 0.2 per cent increase to the average annual electricity bills would result in an $11 increase in the first year. The overall impact for an average small business customer over the five-year period is estimated be an increase of $212.251

Monitoring of supply in the National Electricity Market

Ausgrid—Draft Decision for the NSW DNSP servicing Sydney, the Central Coast and Hunter Valley, for the five years commencing 1 July 2019.

- The Decision allows for an 18.5 per cent real reduction in total allowed revenue compared with the current regulatory period.
- Holding all other components of the bill constant, the average annual electricity bill for a residential or small business customer is expected to be 2.6 per cent lower by the end of the five-year period.
- For residential and small business customers, the average annual electricity bill is estimated to be $44 and $104 lower, respectively, by this time.252

Endeavour Energy—Draft Decision for the NSW DNSP servicing Sydney’s greater west, the Blue Mountains, Southern Highlands, the Illawarra and South Coast, for the five years commencing 1 July 2019.

- The Decision allows for a 5 per cent real reduction in total allowed revenue compared with the current regulatory period.
- Holding all other components of the bill constant, the average annual electricity bill for a residential or small business customer is expected to be about 0.4 per cent higher by the end of the five-year period.
- For residential and small business customers, the average annual electricity bill is estimated to be $6 and $12 higher, respectively, by this time.253

Essential Energy—Draft Decision for the DNSP servicing rural and regional NSW, for the five years commencing 1 July 2019.

- The Decision allows for a 7.1 per cent real reduction in total allowed revenue from the current regulatory period.
- Holding all other components of the bill constant, the average annual electricity bill for a residential or small business is expected to be 3.7 per cent higher by the end of the five-year period.
- For residential and small business customers, the average annual electricity bill is estimated to be $70 and $314 higher, respectively, by that time.254

5.3 Market and policy developments relating to network costs

The Terms of Reference of the inquiry require the ACCC to monitor the impact of policy developments in the NEM. There are a range of policy and other market developments relating to network costs. In this section we set out major relevant developments since the REPI. In particular, these include:

- AEMO’s Integrated System Plan
- AER reforms
- government responses to the ACCC’s recommendation for the writing down of regulatory asset bases.

5.3.1 Integrated system plan

In July 2018, AEMO published its inaugural Integrated System Plan (ISP), setting out the NEM’s overall transmission system requirements over a 20-year horizon. The Plan identifies where and when network investment should be made to cost-effectively support the transitional requirements of the system as aging generators retire and new generation is connected.255

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Projects were identified in three categories:

- **Group 1**—those for which immediate investment should be undertaken, with completion as soon as practicable
- **Group 2**—those where initial work should be undertaken now to enable implementation by the mid-2020s
- **Group 3**—projects to enhance the capability of the grid beyond the mid-2030s.

The ISP is a multi-billion dollar program. By comparison, in June 2018, the total value of transmission assets in the NEM was $21.1 billion.

AEMO envisages that the ISP will be updated in future years to reflect the dynamic nature of the power system and the need to continually innovate and evolve strategies for the future.

In August 2018, the COAG Energy Council requested the ESB work with the AEMC, AEMO and AER to convert the ISP into an actionable strategic plan.

In its report to the COAG Energy Council in December 2018, the ESB made a series of recommendations, particularly in support of expediting the delivery of Group 1 projects, including:

- streamlining regulatory processes
- examining the merits of establishing a fund to underwrite expenditure
- ensuring governments establish priority planning approvals for these projects.

The COAG Energy Council endorsed this approach and tasked the ESB with considering how these reforms could be applied to other priority projects, including the SA-NSW interconnector (see next section). It also called for regular updates and reassessments of Group 2 and 3 projects in future.

On 14 February 2019, the AEMC confirmed that regulatory processes have commenced for all Group 1 projects and a number of Group 2 projects.

We consider that, given the financial magnitude of capital expenditure programs under consideration, it is important that the regulatory reviews for each project involve broad stakeholder consultation and a comprehensive cost benefit analysis to ensure that network costs passed on to the consumer are kept to a minimum.

In the final REPI report, we highlighted the adverse implications of over-investment in network assets for electricity users, particularly in relation to higher electricity prices. We noted that, in NSW, Queensland and Tasmania, excessive reliability standards and a regulatory regime tilted in favour of network owners at the expense of electricity users had resulted in annual residential customer bills being between $100 and $200 higher than they would have been otherwise.

**South Australia Energy Transformation**

AEMO identified the need for new transfer capacity of 750 MW between NSW and SA, and included it as a Group 2 project in its ISP. At that time, a regulatory proposal for the project was already being progressed by proponents.

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In 2016, ElectraNet (SA’s government-owned transmission network business) commenced an investigation of the interconnector and network support options to reduce the state’s electricity prices, improve system security, and facilitate the transition of the NEM to low emission energy sources.263

On 13 February 2019, ElectraNet released its Project Assessment Conclusions Report, confirming a new 330 kV interconnector between mid-north SA and Wagga Wagga in NSW, including a transmission line augmentation between Buronga in NSW and Red Cliffs in Victoria, as the preferred option.264

In particular, the Report noted that this option is expected to:
- reduce the cost of providing secure and reliable electricity in SA, reducing the state’s reliance on high cost gas plants for dispatchable capacity
- more cost effectively enable greater integration of renewables in the NEM
- provide diverse low-cost renewable generation sources to assist meeting future NSW demand as existing coal-fired generators retire.265

In its modelling for the project, Acil Allen calculated savings on annual residential customer bills in SA and NSW of about $66 and $30, respectively.266

The new transmission infrastructure is also expected to enable parties to obtain hedging contracts in SA more easily, reducing the liquidity problems in the state’s contract market.267

The project is expected to cost $1.53 billion and could be completed between 2022 and 2024.268 The governments of NSW and SA signed an MOU on 19 December 2018, establishing a framework for co-operation with a view to bringing forward the delivery date of the project.269

Following the conclusion of the Regulatory Investment Test for transmission network (RIT-T) process, the AER is now required to make a determination on whether the cost of the project can be recovered through regulated network charges.

On 14 February 2019, the ESB submitted a rule change request to the AEMC, proposing NER amendments to streamline the AER’s regulatory assessment process for this project.270 It considers that the AER’s overall regulatory review of the South Australia Energy Transformation project could be fast-tracked, saving between five and six months, without removing any steps in the assessment process or comprising on its rigour.271

New interconnection from Tasmania to Victoria

AMEO has included MarinerLink, a second Bass Strait interconnector from Tasmania to Victoria, as a Group 2 project in its ISP with an indicative completion date of 2033. It noted that the project would be driven by the long-term need for energy storage across the NEM and replace energy currently produced by Victoria’s coal-fired power generators.272

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270 RIT-T is a comprehensive public economic cost benefit test that network businesses are required to perform and consult on before making major investments in their network.


272 In December 2018, the ESB had made a similar rule change proposal seeking to streamline the regulatory process for two priority Group 1 ISP projects.

In February 2019, TasNetworks released an Initial Feasibility Report into the project.\textsuperscript{274} It identified a preferred route between north-west Tasmania and Victoria’s Latrobe Valley, and proposed transfer capacity options of 600 MW, or 1200 MW delivered over two stages. The capital cost of the project was estimated at between $1.3 and $3.1 billion. The Report stated that the project could deliver over $450 million in economic benefits, but the size and timing of these benefits would depend on the retirement of mainland generators.\textsuperscript{275}

TasNetworks is expected to finalise its feasibility and business case assessment, undertaken as part of the RIT-T process, by December 2019.\textsuperscript{276} On 25 February, the Australian Government provided a further $56 million to assist with this review.\textsuperscript{277}

In preparation for its next ISP, AEMO is undertaking further work to understand how the project can be best integrated with Tasmania’s Battery of the Nation project.\textsuperscript{278}

\subsection*{5.3.2 AER reforms}

Over time, supported by changes to the NEL and NER, the AER’s Better Regulation reform program has established a regulatory approach that provides NSPs with the appropriate rewards (and penalties) to make efficient investment decisions.\textsuperscript{279}

Since the final REPI report was released, the AER has finalised a number of key complementary reviews which are discussed below:

- regulatory tax approach review
- Rate of Return Instrument
- Regulatory Investment Test Application Guidelines.

\section*{Regulatory tax approach review}

The amount of tax a network business is expected to pay each year is considered by the AER, along with expected capital, operating and financing costs, when its sets revenue allowances.

In May 2018, the Australian Government asked the AER to review its approach to estimating tax for regulated energy networks following preliminary advice from the Australian Tax Office (ATO) that there appeared to be differences between networks’ tax allowances set by the AER and actual tax paid to the ATO.\textsuperscript{280}

On 17 December 2018, the AER released its final report, finding that the differences were largely due to the complex structure and nature of regulated networks, in particular the impact of taxable revenue and expenses outside the scope of those businesses.\textsuperscript{281}

However, the AER identified a number of improvements to its current approach which could be expected to reduce future regulated tax allowances. These included addressing depreciation mismatches around the immediate expensing of refurbishment capital expenditure and diminishing value depreciation.

The AER indicated that these changes will be first applied in its regulatory determinations from April 2019.

\begin{thebibliography}{9}
\bibitem{274} TasNetworks, Project Marinus—Initial feasibility report, February 2019.
\bibitem{276} TasNetworks, Project Marinus—Initial feasibility report, overview, February 2019, p. 16.
\bibitem{278} AEMO, Integrated System Plan, July 2018, p. 88.
\bibitem{279} AER, Overview of the better regulation reform package, April 2014.
\bibitem{280} The Hon. Josh Frydenberg, Minister for the Environment and Energy, Letter to the AER re: tax allowances, 3 May 2018.
\bibitem{281} AER, Final report: Review of regulatory tax approach, December 2018.
\end{thebibliography}
2018 Rate of Return Instrument

On 17 December 2018, the AER published its Rate of Return Instrument, setting out the approach by which it will determine the allowed rate of return on capital.282

Key changes from its previous Rate of Return Guideline, issued in 2013, include:

- a reduction in the value of the market risk premium from 6.5% to 6.1%
- a reduction in the value of the equity beta from 0.7 to 0.6
- an increase in the value of imputation credits (gamma) from 0.400 to 0.585.283

Under new legislation developed by the COAG Energy Council, the 2018 Rate of Return Instrument is binding. This means that, for regulatory determinations over the next four years, the AER and network businesses are required to automatically set the rate of return according to fixed parameters and methods of calculation identified by the instrument, without exercising discretion.284

The return on capital makes up approximately 50 per cent of a network business’ allowed revenue. The AER has estimated that the 2018 Rate of Return Instrument, when applied to new regulatory determinations, will help reduce consumer bills by between $30 and $40 per annum.285

2018 Regulatory Investment Test Application Guidelines

When an NSP proposes to make a large capital investment, it is required to apply and consult on a cost benefit analysis, called a Regulatory Investment Test (RIT), to select the most efficient way to meet the need for that investment. The preferred option amongst a group of identified alternatives is the one which maximises the present value of the net economic benefits to those who produce, transport and consume electricity.

There are two types of RITs—one for distribution networks (RIT-D) and another for transmission networks (RIT-T).

The AER, which has a compliance and monitoring role over the operation and application of the RITs, publishes Regulatory Investment Test Application Guidelines to assist NSPs to conduct a RIT consistently and transparently.

On 14 December 2018, following a twelve month review, the AER revised these guidelines.286

Key changes from previous versions include the provision of new guidance on:

- the conduct of cost benefit assessments for large replacement projects, which, following a NER change, are now subject to a RIT287
- how AEMO’s ISP should inform NSPs in applying their RITs, for example, in terms of input assumptions and understanding the inter-regional impacts of potential investments.288

The AER has foreshadowed that ongoing developments associated with AEMO’s ISP may lead to changes in the NER that will warrant further review of the guidelines, and the RITs themselves.289


284 AER, Rate of return instrument—Explanatory statement, December 2018, p. 12.


5.3.3 Write-down of regulatory asset bases

In the final REPI report, we identified the historical over-investment in publicly-owned networks in Queensland, New South Wales and Tasmania, which added significantly to NSP regulated asset bases (RABs), as being the primary contributor to higher electricity prices in those NEM jurisdictions.

The value of the RAB underpins the regulatory model which determines the maximum revenue that regulated NSPs in the NEM can earn from providing regulated services, and consequently the maximum network prices the AER allows them to charge retailers. Retailers then pass on these network costs to consumers in retail prices.

Two elements of this model, which in total comprise between 50 and 70 per cent of an NSP’s annual revenue requirement, depending upon the network, provide financial compensation for past investments in regulated assets:²⁹⁰

- a return on capital, at a regulated risk-adjusted rate, which provides the entity with revenue to service the interest on its loans and to provide a return on equity to shareholders. It is equivalent to the weighted average cost of capital (WACC) multiplied by the RAB
- a return of capital, or depreciation, which enables the NSP to recover its entire capital investment, given by the RAB, over the economic life of the asset.

To the extent that RABs don’t reflect an efficient level of investment, higher network charges are directly passed through to customers in the form of higher prices. Accordingly, writing down the RAB to remove the financial impact of this over-investment would commensurately lower retail electricity prices.

The Grattan Institute estimated that the over-investment in regulated network assets across the NEM was approximately $20 billion (out of an aggregated NEM RAB of $90 billion), with $18.5 billion of that excess capital expenditure residing in Queensland and NSW networks alone.²⁹¹

In the final REPI report we noted that this over-investment was largely due to:

- an increase in network reliability standards in Queensland and NSW, following outages in 2004
- incentives in the regulatory framework, particularly those incentives where the rule structure and a high rate of return relative to actual financing costs faced by the businesses, encouraged greater investment
- public ownership of networks in Queensland and Tasmania and (until recently) NSW.²⁹²

These investment and regulatory policy decisions effectively locked in additional costs for current users. As network assets generally have long economic lives, these RAB-induced higher prices will continue to prevail, in the absence of intervention.

Accordingly, we recommended that, with appropriate assistance of the Australian Government, the state governments of Queensland, NSW and Tasmania, as existing or past asset owners, should take immediate remedial steps to improve affordability for electricity customers:

- through a voluntary write-down of those RABs, or
- where the regulated assets have been subsequently fully or partially privatised, through the provision of rebates on network charges (recommendation 11).²⁹³

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We considered that these actions, based on removing the level of over-investment identified by the Grattan Institute, would result in at least $100 a year in savings for average residential customers in those states.

To date, there has not been action on the ACCC’s recommendation to write-down asset bases and it does not appear that governments are intending to pursue this recommendation.

In Queensland, where this matter was previously raised in the context of a Queensland Productivity Commission inquiry into Queensland’s electricity prices in 2015-16, the state government response at the time was that it has no current plans to revalue the RABs of the network businesses.

The Queensland Government’s policy position does not appear to have changed, with the Queensland Treasurer noting subsequent to the release of the final REPI report that writing down our assets ... is not in the interests of Queenslanders generally.

The lack of progress in pursuit of this reform measure means that inefficiently high electricity prices continue to impact economic and social activity, prolonging financial pressures for all sectors of the economy, in particular households and energy-intensive industries.

Revaluing the RAB would enable electricity prices to more accurately reflect the efficient cost of supply. In turn, this would generate significant efficiency benefits to the economy.

Electricity is an input for almost all economic activity. Reducing electricity costs would result in a broad-based reduction in input costs for businesses across the economy, and would increase the disposable income available to most households.

The ACCC accepts that the costs of writing down excessive RABs would involve a potentially large one-off cost to governments. However, reducing the unnecessarily high cost of electricity would result in increased productivity and growth in the economy and, overall, enhance welfare. Such a move would be an important microeconomic reform and consistent with past actions of governments in funding significant microeconomic reforms. Significantly, under the Agreement to Implement the National Competition Policy and Related Reforms, there were three tranches of payments from the Australian Government to the states and territories, where they achieved satisfactory progress against their reform commitments.

We maintain the view that:

- as owners of the networks at the time capital investment decisions were made, state governments bear the responsibility for remediating their policy mistakes and providing their constituents with price relief, and
- to the extent that the regulatory regime incentivised inefficient levels of expenditure on the part of NSPs, there is an onus on the Australian Government to provide financial assistance to support the states in this endeavour.

We consider that a once-off voluntary government write-down is most appropriate as:

- government policies were the key drivers of this excess investment. In this context, electricity users should not be required to pay for remedial measures
- it is more equitable. All users will pay contributions through their taxes, rather than just those with high grid-supplied electricity usage

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295 ACCC, Restoring electricity affordability and Australia’s competitive advantage, Retail Electricity Pricing Inquiry—Final Report, June 2018, p. 171.
297 The Hon. Jacklyn Trad, Deputy Premier, Treasurer and Minister for Aboriginal and Torres Strait Islander Partnerships (Queensland), Queensland Hansard: Economics and Governance Committee—Estimates hearing, 24 July 2018, p. 71.
- paying for over-valuation out of taxation now, rather than through ongoing charges, is more transparent as to how costs are being recovered.

### 5.3.4 AEMC’s 2019 review of economic regulatory frameworks

In 2016, the COAG Energy Council provided the AEMC with a standing Terms of Reference to annually monitor and report on market developments, and make an assessment as to whether the economic regulation of electricity networks is sufficiently robust and flexible to support the long-term interest of electricity users in a future environment where energy supply is becoming increasingly decentralised. This policy advice enables the COAG Energy Council to decide on future changes to the economic regulatory framework.

For its recently-commenced 2019 review, the AEMC has foreshadowed a focus on:

- continuing to implement the Finkel recommendations on network incentives
- advising on the establishment of a framework for co-ordinating proof of concept trials and how regulatory sandbox arrangements to support innovative projects may be provided.

It will also continue to monitor the principal trends in grid usage, in addition to the uptake of new technology and new business models.

### 5.3.5 Review into electricity distribution reliability standards in NSW

On 26 February 2019, the NSW Government provided the Independent Pricing and Regulatory Tribunal (IPART) with the final Terms of Reference for a review of electricity distribution reliability standards in the state. This referral requires IPART to provide a report to the Premier and the Minister for Energy and Utilities recommending:

- any changes to electricity distribution reliability standards for the NSW distribution network businesses that could deliver bill savings to NSW electricity customers
- any other measures that could be imposed on or implemented by the NSW distribution network businesses within the current regulatory framework that would be likely to reduce network prices and are consistent with the National Electricity Objective.

In the REPI, we recommended that:

- responsibility for setting network reliability requirements should be placed on the AER or another NEM market body, based on a value of customer reliability (VCR) methodology, and
- the responsible market body must ensure changes to requirements are in line with customer preferences or affordability (recommendation 16).

We note that the NSW Government’s final Terms of Reference specifically require IPART to have regard to the final REPI report.

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300 These arrangements would enable participants to trial business models, products and services in the market under temporarily relaxed regulatory requirements while ensuring relevant safeguards are in place.


302 The NSW Government initially referred this matter to IPART in December 2018. IPART subsequently sought public comment on the draft terms of reference.

303 The Hon. Gladys Berejiklian, Premier (NSW), Terms of Reference for IPART to review electricity distribution reliability standards, IPART, 26 February 2019.

5.3.6 REPI recommendations

In the REPI report, we made a series of recommendations in relation to networks. These related to:

- writing down RABs, discussed above (recommendations 11 and 12)
- sharing the costs of stranded assets (recommendation 13)
- transitioning to cost reflective network tariffs (recommendations 14 and 56)
- the roll-out of smart meters (recommendation 15)
- setting reliability standards (recommendation 16)
- reforms to the regulatory framework and processes (recommendations 17, 18 and 20)
- the removal of jurisdictional specific costs in network charges, unrelated to the provision of network services (recommendation 19)
- demand-side participation by network businesses (recommendation 22)
- allowing distribution businesses to develop off-grid supply arrangements (recommendation 23).

Appendix C highlights the progress to date in the implementation of these recommendations.

The AEMC has indicated that it is liaising with the COAG Energy Council, enabling it to be in a position to appropriately respond to any decisions or referrals that the Council may make in response to the recommendations.305

In future reports, over the course of this inquiry, we will continue to monitor and report on the progress of implementation of these recommendations.

5.4 Intended framework for monitoring network costs

In the REPI, we collected data on network costs through information obtained from retailers as well as cross-checking certain data with network companies. This data was used as part of the cost-stack analysis that enabled us to identify which categories of costs were contributing to rising customer bills in each jurisdiction, and across the NEM as a whole.

For this inquiry, we intend to continue to monitor the impact of network costs on electricity prices.

Table 5.2 below summarises what we have outlined in this section as the likely kinds of measures and indicators we expect to use to inform our analysis.

Table 5.2: Summary of network measures and indicators

<table>
<thead>
<tr>
<th>Topic</th>
<th>What we are likely to monitor</th>
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<td>The network cost share of an indicative customer bill</td>
<td>AER and ACCC information gathering powers where necessary</td>
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<td></td>
<td>Impact of annual changes in network charges for average residential and small business customers</td>
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<tr>
<td>Regulatory asset base</td>
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<tr>
<td></td>
<td>Annual capital expenditure by network businesses</td>
<td>AER and ACCC information gathering powers where necessary and other publicly available information</td>
</tr>
</tbody>
</table>

6. Environmental policy costs

The Australian and state governments in the NEM have introduced environmental policies to incentivise the uptake of renewable generation, encourage businesses and households to become more energy efficient, and reduce carbon emissions in line with Australia’s international commitments.

To achieve this, environmental schemes have typically imposed costs on retailers that are passed on to electricity users through their electricity bills.

In general, these policies can be categorised as:

- **national schemes**
  - Large-Scale Renewable Energy Target (LRET)
  - Small-Scale Renewable Energy Scheme (SRES)

- **state schemes**
  - state certificate and efficiency schemes
  - premium feed-in tariff (FiT) schemes.

6.1 Relevant Terms of Reference

In monitoring the electricity prices faced by retail customers in the NEM (ToR (i)), the contribution of environmental costs to those prices needs to be considered.

In the final REPI report we found that environmental costs comprised between 4 and 10 per cent of an average electricity bill. While this is a relatively small portion compared to network or wholesale costs, environmental costs have increased considerably over the last ten years.

6.2 Updates on environmental policy costs

In its 2018 Residential Electricity Price Trends Review, the AEMC noted that environmental policy costs in an average residential electricity bill increased 19 per cent in the twelve months to 2018–19, and were expected to rise further by an average 1.4 per cent annually to 2020–21. This growth is primarily driven by increases in small-scale solar PV installations.

6.2.1 Renewable energy target

The Australian Government’s Renewable Energy Target (RET), initially known as the Mandatory Renewable Energy Target, was created in 2001 with the initial objective of acquiring 2 per cent of national electricity generation from renewable sources. This target was increased in 2009 to 20 per cent (equivalent to 45 000 GWh of renewable energy generation) by 2020.

In 2011, the RET was split into:

- the LRET to encourage the establishment and expansion of renewable energy power stations such as solar farms, wind farms and hydro-electric facilities. It was expected that LRET would deliver 41 000 GWh
- the SRES to incentivise the installation of small-scale renewables such as roof-top solar panel systems and solar hot water heaters.

In 2015, the Australian Government reduced the LRET from 41 000 GWh to 33 000 GWh by 2020.

The LRET and SRES operate through the creation of tradeable certificates for each MWh of renewable energy output. Electricity retailers purchase these certificates from power stations or owners of small-scale systems to meet their legislative compliance obligations. They are then surrendered to the Clean Energy Regulator in proportion to the overall amount of energy consumed by retailers’ customers.

Large-scale generation certificates (LGCs) under the LRET are created annually based on the actual volume of electricity generated by accredited renewable energy sources. They are produced on an ongoing basis and therefore continue to provide an ongoing revenue stream for facility owners in addition to proceeds from the sale of energy generated.

By contrast, small-scale technology certificates (STCs) for new roof-top solar systems under the SRES are based on system location and the expected output of that new system over a 15-year period. In this context, they provide a one-off financial benefit to system installers who generally use the proceeds from the sale of the certificates to reduce the upfront cost of system purchase.

The LRET and SRES costs incurred by retailers are passed on to electricity users in the form of higher bills.

Large-scale renewable energy target

Under LRET, annual targets for renewable energy generation increase each year until 2020. Beyond that time, the annual target remains at 33,000 GWh. For 2018, the target is 28,637 GWh.

The number of LGCs a retailer is required to surrender each year is determined by multiplying the amount of electricity it acquires annually by the renewable power percentage (RPP). In 2018, the RPP was 16.06 per cent. This proportion will continue to increase each year until 2020 in line with the annual GWh target.

Where retailers are unable to meet their obligations under the LRET, they are required to pay a non-tax deductible shortfall charge. The shortfall charge can be refunded within three years of payment. A liable entity that has met the eligibility requirements for claiming a refund can make the claim by surrendering additional LGCs to clear all or part of the shortfall.

For 2018, the LGC surrender rate was 86.1 per cent, with a shortfall of 3.9 million certificates or 13.9 per cent of total liability. There were 17 liable entities that took an LGC shortfall of greater than ten per cent. These included Simply Energy, Red Energy, EnergyAustralia and Lumo Energy.

The price of LGCs sold on the open market are determined by the demand for and supply of these certificates. Their price is expected to decrease over time as the amount of renewable energy built or committed is capable of generating certificates in excess of the volume needed to meet the 2020 target, with new projects also likely.
At the time of the final REPI report, LGCs were priced at around $80.\(^{316}\) Subsequently, there has been a steep decrease in the LGC spot price with the price at about $60 in mid-December 2018 and around $45 in mid-January 2019. Currently, spot prices are around $38, with the forward curve indicating they will fall to around $24 by 2020 and about $12 by 2022.\(^{317}\)

In December 2018, the AEMC reported that for a representative residential customer in the NEM, LRET added $41 to an annual bill in 2018–19, up from $37 in 2017–18.\(^{318}\) Given that spot prices have fallen since the AEMC report, the Clean Energy Regulator has estimated that the pass-through costs for the 2019 calendar year would be about $33.\(^{319}\)

**Small-scale renewable energy scheme**

Unlike LRET, SRES is an uncapped scheme. It imposes no overall limit on the number or overall capacity of subsidised installations.

Figure 6.1 below shows the growth in solar PV installations across the NEM since 2001.

**Figure 6.1: Growth in small-scale solar PV installations**

This growth was initially driven by the financial incentives provided by the SRES and generous FiT schemes. More recently, system growth has been facilitated by the dramatic fall in the price of technology.

During 2018 there were over 200,000 systems installed with a combined capacity in excess of 1.4 GW. This brings the total number of PV installations and their combined capacity to around two million and 8 GW respectively.\(^{320}\)

It is likely that new state-based rebate programs (see below) will continue to fuel growth in the number of solar installations in future years.

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The design of the SRES, whereby new certificates are generated by the new installations each year, and the requirement for retailers to surrender those certificates each year (or the next), means that its costs are likely to continue until the end of the scheme in 2030.

The number of certificates per installation (which are provided up-front for deemed generation over the period of the scheme) will decline slowly as 2030 approaches.221 This will lead to the ongoing costs of the scheme reducing relatively slowly over time for future installations.

The number of STCs a retailer is required to surrender annually is determined by multiplying the amount of electricity it acquires each year by the small scale technology percentage (STP).222 The STP is set for twelve months on the basis of the estimated number of STCs that will be created, with an adjustment for past over or under-recovery.

In 2018, the STP was 17.08 per cent223, significantly higher than the 7.01 per cent the previous year. This was driven by the level of investment in small-scale systems being well above forecast in 2017 which, in turn, created a large level of excess certificates in the market for purchase in 2018.

The price of STCs is effectively capped—rather than buying STCs on the open market, retailers can purchase them from the STC Clearing House for a fixed price of $40 (ex. GST). Since 2015, STC prices have generally been at or near this cap. In 2017, the spot price dropped to around $30 in the middle of the year and tracked back to around $40 by the end of the year.224 The current spot price is around $35.

The Clean Energy Regulator anticipates that the 2019 STP will likely be higher than its estimate of 12.13 per cent published earlier in the year,225

The AEMC reported that for an average customer in the NEM, SRES added $32 to an annual bill in 2018–19, up from $19 in 2017–18. This is expected to grow to $36 by 2020–21.226

6.2.2 Premium FiT schemes

Solar FiT schemes provide eligible electricity customers with a payment for excess energy fed back into the electricity grid from their rooftop solar PV systems. State governments first introduced FiT schemes in the mid to late 2000s to encourage residential and small business uptake of solar generation technology.

These early arrangements, now referred to as premium FiT schemes, were generous, providing customers with a return in excess of the wholesale price (and in most cases, the retail price) of electricity.227

Initially, premium FiT schemes were paid for by electricity consumers. Each electricity DNSP would pay the amount of the FiT, based on metering data, to electricity retailers who subsequently credit the accounts of relevant customers. The DNSPs would then recover the cost of the FiT through higher regulated network charges, approved by the AER, ultimately resulting in higher electricity charges for all customers.

321 The deeming period for solar PV systems decreases annually by one year until 2030. This gradually reduces the number of certificates that can be created for an eligible system.
322 The STP is the proportion of a retailer's electricity sales that need to be surrendered as STCs. The figure is set annually by 31 March each year through regulation.
327 For example, in Queensland, the FiT was more than triple the wholesale market rate at the time the Solar Bonus Scheme was introduced. See the Hon. Anna Bligh, Queenslanders receive cash incentive to tackle climate change, Media release, Queensland Government, 11 March 2008, viewed 7 March 2019 http://statements.qld.gov.au/Statement/2008/3/11/queenslanders-receive-cash-incentive-to-tackle-climate-change.
Premium FiT schemes proved to be more popular than policy-makers expected and, as a result, the size of the payments, and the impact on retail prices, were greater than anticipated.

All premium FiT schemes across the NEM jurisdictions have now been closed to new entrants and, for some, payments to customers under these schemes have ended.

In the absence of access to these schemes, households and small business can access FiT schemes offered voluntarily by retailers. Generally, the cents/kWh tariff for these voluntary schemes are much lower than the rates provided by the mandatory premium schemes.

For those remaining premium FiT schemes, significant legacy costs will continue to be incurred for their duration. In the final REPI report, we recommended that these scheme costs should be funded directly by the jurisdictional governments as in the case of Queensland, rather than be recovered through charges to electricity users (recommendation 25). This would reduce electricity bills, allocate scheme costs more equitably and provide greater transparency.

We are not aware of any response from relevant state governments in relation to our recommendation for FiT schemes to be funded by state government budgets. The Queensland Government had already taken this step in 2017, a move that the ACCC strongly supports.

Accordingly, in Victoria, SA and the ACT, the costs associated with premium FiT schemes in those jurisdictions are still borne by electricity customers. Table 6.1 illustrates the expected annual FiT costs over time for a representative residential customer in those jurisdictions.

Table 6.1: Annual premium FiT scheme cost, representative residential customer, $

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Victoria</td>
<td>$13</td>
<td>$15</td>
<td>$16</td>
<td>$17</td>
</tr>
<tr>
<td>South Australia</td>
<td>$53</td>
<td>$64</td>
<td>$64</td>
<td>$64</td>
</tr>
<tr>
<td>ACT</td>
<td>$136</td>
<td>$89</td>
<td>$159</td>
<td>$184</td>
</tr>
</tbody>
</table>

Source: AEMC 2018 Residential electricity price trends, final report.

In Victoria and SA, growth in premium FiT costs are likely to be generally small over the next couple of years. By contrast, ACT customers may experience significant growth in 2019–20 FiT costs from levels that are already relatively high compared with other jurisdictions. The ACT Government has indicated that higher FiT payments may need to be made to large scale generators as the territory approaches its target of 100 per cent renewable energy.

In addition to directly funding these schemes, consistent with recommendation 25 in REPI, we consider that jurisdictions should continue to monitor participation in these legacy FiT schemes, particularly as technology evolves, with a view to minimising costs to electricity users and taxpayers.

In this context, we note that, in September 2018, the Queensland Government tightened the eligibility requirements for its premium FiT scheme, placing limits on the ability of scheme participants to augment their systems through, for example, the deployment of energy storage devices and additional PV panels.

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331 *Electricity and Other Legislation (Batteries and Premium Feed-in Tariff) Amendment Bill 2018 (Qld)*, Explanatory Note, p. 3.
6.2.3 State-based energy efficiency schemes

NSW, ACT, Victoria and SA have jurisdiction-specific energy efficiency schemes, the costs of which are recovered fully or in-part from local electricity users. These costs, as a proportion of customer bills, are small, and are expected to remain relatively constant over time.

In NSW, the Energy Savings Scheme (ESS) reduces energy consumption in the state by providing households and businesses with financial incentives to invest in energy saving appliances or practices. The Scheme places an obligation on retailers to fund energy efficiency through the acquisition of energy saving certificates. The AEMC estimated the annual cost of the scheme in 2017–18 to be $7 for a representative NSW customer, and will likely remain unchanged in subsequent years.

The ACT’s Energy Efficiency Improvement Scheme (EEIS) requires the territory’s electricity retailers to meet energy savings targets by delivering energy savings initiatives to residential and small-to-medium business customers. The EEIS is funded by electricity retailers who pass through a proportion of the costs to their ACT customers. In 2017–18, the AEMC calculated the scheme costs a representative customer around $30. This cost is not expected to change materially in the short term.

The Victoria Energy Upgrades program provides households and businesses in Victoria with access to discounted energy-efficient products and services. In 2018, the AEMC estimated that the scheme added $7 to the annual bill for a representative Victorian household. It forecast this annual cost to rise to $14 by 2021.

In SA, the Retailer Energy Efficiency Scheme (REES) provides incentives for SA households and businesses to save energy. It does this by setting retailers targets for the delivery of energy efficiency and auditing services. In 2017–18, the AEMC estimated that the scheme contributed $13 to an annual bill for a representative consumer in the state. This cost is not expected to change over the three years to 2020–21.

6.3 Market and policy developments relating to environmental policy costs

6.3.1 National Energy Guarantee

The National Energy Guarantee (NEG) was policy developed by the ESB and considered by the Australian and state governments. Its intent was to encourage new investment in the electricity system to meet both reliability and emissions-reduction objectives.

The NEG proposed to place an obligation on retailers to contract with generation, storage or demand response to ensure the:

- availability of a minimum amount of dispatchable energy to meet the needs of users and the system, and
- average emissions level of the electricity sold meets the sector’s share of the nation’s international emissions reduction commitments.

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336 AEMC, 2018 Residential electricity price trends review, Final report, 21 December 2018, p. 82.
On 20 August 2018, the Australian Government decided not to proceed with the emissions component of the NEG.\(^{340}\)

### 6.3.2 Australian Government response to REPI recommendation 24

In the final REPI report, we recommended that the SRES should be wound down and abolished by 2021 (recommendation 24). We estimated that this would save an average residential customer in the NEM $15–30 per year, depending on the state.\(^{341}\) On 24 October 2018, the Australian Government stated that it did not plan to change the SRES or the LRET.\(^{342}\)

We recognise the ongoing benefits that these small rooftop systems provide across the electricity supply chain. At the individual household level, solar PV owners are able to reduce their reliance on the network and, by exporting excess electricity, they receive a FiT payment that offsets charges associated with grid-supplied energy.

Similarly, at the market level, rooftop solar can defer or obviate the need for network augmentation and investment in new generation capacity. In turn, this could be expected to have a moderating effect on infrastructure-related price pressures, particularly in the short term. The installed solar capacity also makes a contribution to the country’s emissions goals and commitments under the Paris agreement.

However, we consider that the SRES rebate is no longer necessary to sustain the incentives for households to continue to invest in small-scale solar technology.

SRES was first implemented at a time when the capital cost of household rooftop systems was generally prohibitive. These costs have fallen dramatically over time. We noted in our final REPI report that

\[
\text{[i]n 2007, the pre-subsidy cost of installation of a 1.5 kW system (the typical system size at the time) was around $18 000. By 2014, a 3 kW system cost less than half of that amount to install and today, a similar system is around $5000 before any subsidy.}\(^{343}\)
\]

With lower upfront costs, new systems have become more affordable and given rise to a commensurately shorter pay-back period. In the absence of financial assistance, customers would still have an incentive to invest in small-scale solar technology to reduce their electricity bills, given the relative cost of that investment is now lower and the potential savings as a proportion of that smaller outlay are greater than they were previously.

In this context, we maintain that the case for a continued subsidy for these systems is weak and that, accordingly, the SRES should be abolished by 2021. The scheme is expected to cost the average residential customer in the NEM $36 in 2020-21.\(^{344}\)

### 6.3.3 New state-based solar rebate schemes

New and proposed future state-based schemes will encourage further investment in rooftop solar. While the cost of these programs will be funded transparently through state budgets, they will potentially drive retail electricity prices higher through their impact on the SRES.

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Victorian Solar Homes program

On 19 August 2018, the Premier of Victoria announced the $1.24 billion Solar Homes program to encourage households to install solar PV systems, enabling them to save money on their electricity bills.345

The means-tested program provides eligible households346 with:

- a 50 per cent rebate on the cost of an average 4 kW system (maximum rebate of $2225 in 2018, declining over time)
- from 1 July 2019, a four-year interest free loan to pay back the remaining system cost.

Under the ten-year program, the number of homes with solar panels in the state is expected to increase by 650 000 to one million, with participating households saving an average of around $890 annually on their electricity bills.

In its first five months of operation, almost 7000 households have installed a solar PV system under the program.347

SA’s Home Battery Scheme

SA’s Home Battery Scheme, which commenced in October 2018, provides 40 000 households with access to $100 million in state government subsidies to assist with the purchase and installation of a home battery system. The scheme seeks to reduce peak demand and lower power prices for all of SA’s electricity customers.

Individual subsidies vary depending upon system size, but are capped at a maximum of $6000. Over time, this cap and the level of individual subsidies provided are expected to fall as battery systems become cheaper.348

The scheme is supported by $100 million from the Clean Energy Finance Corporation, enabling eligible households to apply for low interest loans to assist in the purchase of new or additional solar panels, as well as the battery system.349

Queensland grants and loan scheme

On 18 November 2018, the Queensland Government announced a new scheme to provide eligible applicants with financial assistance to purchase and install a battery or combined solar and battery system.350

The 3200 assistance packages available under the scheme include:

- grants of $3000 for households and small businesses
- interest-free loans of up to $10 000, repayable within 10 years, for households only.351

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346 To be eligible, a participant’s household income must be $180 000 per year or less, and the house must be valued at less than $3 million. In addition, the household cannot access the solar program if it has already applied for a solar hot water rebate also available as part of the scheme.
This scheme is in addition to the means-tested program which commenced in June 2018, providing 3500 interest free loans of up to $4500 for eligible households to install a solar system.\textsuperscript{352}

**Future NSW solar subsidy**

In the lead-up to the 2019 NSW state election, both the Opposition and the NSW Government proposed solar schemes to be implemented if elected.

On 9 February 2019, the Leader of the Opposition announced Labor’s Solar Homes policy to assist 500 000 state households install rooftop solar systems and reduce their power costs.\textsuperscript{353}

Under the policy, owner-occupied households with a combined income of up to $180 000 would be eligible for a rebate capped at $2200 per household. It was estimated that, on average, participating households could save up to $1000 per annum off their electricity bills.

On 10 February 2019, the NSW Premier announced the ten-year Empowering Homes program. A key element of this program is the provision of interest-free loans for 300 000 households to purchase solar energy and battery storage systems.\textsuperscript{354} To be eligible, applicants will need to be owner-occupiers of the house, with an annual household income of up to $180 000. The program will make available loans of up to $9000 for each battery system and up to $14 000 for a solar-battery system.

### 6.3.4 Victorian Government Reverse Auction

Victoria’s Renewable Energy Target (VRET) seeks to ensure that 25 per cent of the state’s electricity generation will come from renewable sources by 2020, rising to 40 per cent of generation by 2025.

In 2017–18, the Victorian Government conducted a reverse auction through the Victorian Renewable Energy Auction Scheme, guaranteeing the provision of long-term support agreements for up to:

- 550 MW of large-scale renewable generating systems based on wind, solar or other declared energy sources
- 100 MW of large-scale solar specific renewable energy.\textsuperscript{355}

On 11 September 2018, three wind farms and three solar farms were announced as the successful projects.\textsuperscript{356} While 669 MW has been successfully contracted under the auction, the proponents agreed to construct an additional 259 MW of capacity, bringing the total new renewable generation capacity to 928 MW.\textsuperscript{357}

The minimum capacity needed to achieve the 2025 target is to be determined by 31 December 2019.\textsuperscript{358} The Victorian Government will subsequently identify the need for further auctions to meet this capacity, based on market and national policy conditions.


\textsuperscript{353} The Hon. Adam Searle MLC, Labor will deliver solar panels for half a million homes across NSW, Media Release, 9 February 2019, viewed 7 March 2019, https://adamsearle.org/newsroom/media/labor-will-deliver-solar-panels-for-half-a-million-homes-across-nsw/.


\textsuperscript{355} This composition has been established to ensure that support is provided for the state’s emerging large-scale solar industry and to deliver diversity in renewable energy generation.


\textsuperscript{358} Renewable Energy (Jobs and Investment) Act (Vic), s. 9(a).
### 6.4 Intended framework for monitoring environmental policy costs

In the REPI, we collected data on environmental costs through information obtained from retailers as well as cross-checking certain data with network companies. This data was used as part of the cost-stack analysis that enabled us to identify which categories of costs were contributing to rising customer bills in each jurisdiction, and across the NEM as a whole.

We intend to continue this approach throughout the inquiry for as long as these environmental schemes remain in place.

In particular, we intend to request:

- retailers provide us with their total costs for complying with environmental schemes, broken down into:
  - customer-type
  - jurisdiction
  - scheme (such as the SRES, LRET and non-FiT state schemes)
- DNSPs to provide data on the legacy premium FiT costs and any other jurisdictional schemes costs which are recovered through network prices.

This information will also allow us to report on the breakdown of environmental costs in average annual residential electricity bills across the jurisdictions, and the NEM as a whole into the categories of:

- LRET
- SRES
- premium FiT schemes
- other state schemes.

Table 6.2 below summarises what we have outlined in this section as the likely kinds of measures and indicators we expect to use to inform our analysis.

<table>
<thead>
<tr>
<th>Topic</th>
<th>What we are likely to monitor</th>
<th>Likely data sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental costs</td>
<td>The cost of LRET paid by electricity consumers</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>The cost of SRES paid by electricity consumers</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>The costs of state-based premium FiT schemes</td>
<td>AER data and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>The costs of state-based efficiency schemes</td>
<td>AER data and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td>LRET</td>
<td>The price of Large-scale Generation Certificates</td>
<td>AEMC and other publicly-available information where appropriate</td>
</tr>
<tr>
<td></td>
<td>Total renewable energy generation</td>
<td>Clean Energy Regulator, AEMC and other publicly-available information where appropriate</td>
</tr>
<tr>
<td>SRES</td>
<td>The price of Small-scale Technology Certificates</td>
<td>Clean Energy Regulator, AEMC and other publicly-available information where appropriate</td>
</tr>
<tr>
<td></td>
<td>The number and installed capacity of small-scale installations</td>
<td>Clean Energy Regulator, AEMC and other publicly-available information where appropriate</td>
</tr>
<tr>
<td>State-based schemes</td>
<td>The number of installations supported by jurisdictional schemes and the total capacity of those systems</td>
<td>Clean Energy Regulator, AEMC and other publicly-available information where appropriate</td>
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</tbody>
</table>
7. Information collection and reporting schedule

The ACCC is required to provide its first report to the Treasurer by 31 March 2019, and to report at least every six months thereafter until the conclusion of the inquiry on 31 August 2025. The ACCC sought comment in its Discussion Paper on the process and timing for the collection of information and data to inform these reports.

7.1 Submissions

Origin submitted that a reporting schedule of April and October would be preferable to March and September. Origin noted that it reports its full year results in mid-August and half year results in mid-February, so this time schedule would better allow for the provision of that data.\(^{359}\)

AGL also noted that it releases financial reporting for half and full year results in February and August of each year.\(^{360}\) AGL recommended that the ACCC consider reporting in May and November. In addition, AGL suggested that the ACCC should only collect data that is produced in the ordinary course of business so as to ensure reliability and consistency over time.\(^{361}\) AGL considered that extracting, analysing and reviewing data for submission may take some time, potentially around five to six weeks in busy periods as also noted by ERM Power below.\(^{362}\)

ERM Power submitted that, depending on the extent of data requests, retailers may need to be given up to two months to respond. ERM Power also stated that any data requests that cover the period ending 30 June coincides with a busy period at the end of the financial year. In addition, ERM Power noted that March covers a very busy period around mandatory green scheme reporting.\(^{363}\)

EnergyAustralia also indicated that it would be able to provide data annually and report on a calendar year basis, ideally mid to late February each year. EnergyAustralia submitted that it would prefer that the ACCC maintain a consistent methodology over time in order to minimise compliance burden.\(^{364}\)

Alinta Energy submitted that consideration should be given to the standard cycle of financial reporting of retailers so as to ensure efficiencies in information provision, and that lead times need to be considered for any data submission to meet report publishing requirements.\(^{365}\)

Meridian Energy submitted that the ACCC should be able to form a relatively comprehensive view of the market by limiting comprehensive monitoring to no more than once a year and holding bilateral discussions on a more regular basis.\(^{366}\)

A number of submissions also recommended that the ACCC use data that is publicly available or already collected by agencies such as the AER, AEMO or the AEMC. Some submitted that any data collection undertaken by the ACCC should be aligned with timeframes imposed by other agencies so as to avoid the burden associated with requiring businesses to report variations of the same data sets across slightly different periods.


7.2 Conclusion

As far as practicable, the ACCC will use information and data that is publicly available or is already collected by other agencies and can be made available to the ACCC. However, for the reasons set out in earlier sections, there will be instances where the ACCC will need to obtain certain information or data from market participants, such as energy providers.

A number of submissions raised concerns around the potential for a reporting schedule of March and September, highlighting some difficulties with providing end of calendar year or financial year results much more than a month ahead of those periods. While the ACCC is required to report at least every six months, we do also intend to report on pressing or contemporary issues at intervening intervals. This means that the ACCC does have some flexibility surrounding the collection and reporting of calendar year and financial year data. To the extent possible, we will consult with relevant stakeholders ahead of issuing any such requests so as to determine appropriate timeframes that will align with the availability of information.

Finally, the ACCC notes some further concerns raised in submissions around the use of compulsory information gathering powers and also the potential burden in providing information that the businesses do not regularly produce and report themselves. As noted, we intend to consult further with relevant stakeholders around the specific information and data that will be required and will seek to structure the requests in similar formats each time to ensure consistency and to minimise the administrative burden on the providers of the information and data.
Appendix A: Terms of Reference

COMPETITION AND CONSUMER ACT 2010

INQUIRY INTO ELECTRICITY SUPPLY IN AUSTRALIA

I, Scott Morrison, Treasurer, pursuant to subsection 95H(1) of the Competition and Consumer Act 2010, hereby require the Australian Competition and Consumer Commission (ACCC) to hold an inquiry into prices, profits and margins in relation to the supply of electricity in the National Electricity Market.

Matters to be monitored and taken into consideration in the inquiry include but are not limited to:

i. electricity prices faced by customers in the National Energy Market including both the level and the spread of price offers, analysing how wholesale prices are influencing retail prices and whether any wholesale cost savings are being passed through to retail customers;

ii. wholesale market prices including the contributing factors to these such as input costs, bidding behaviour and any other relevant factors;

iii. the profits being made by electricity generators and retailers and the factors that have contributed to these;

iv. contract market liquidity, including assessing whether vertically integrated electricity suppliers are restricting competition and new entry; and

v. the effects of policy changes in the National Electricity Market, including those resulting from recommendations made by the ACCC in its Retail Electricity Pricing Inquiry report of July 2018.

Where appropriate, the inquiry will make recommendations to government(s) to take any proportional and targeted action considered necessary to remedy any failure by market participant(s) (or the market as a whole) to deliver competitive and efficient electricity prices for customers.

The ACCC would make use of publicly available information, including that published by the Australian Energy Regulator, the Australian Energy Market Commission or the Australian Energy Market Operator, where appropriate.

This is not to be an inquiry into supply by any particular person or persons, or by a State or Territory Authority.

The inquiry is to commence today. The inquiry is to provide its first report to me by 31 March 2019 and no less frequently than every six months thereafter. The first report should focus on setting out the analytical framework for monitoring and provide information about expectations of market outcomes and market participant behaviour. The inquiry should also provide information to the markets as appropriate. The inquiry is to conclude and provide its final report by 31 August 2025.

DATED THIS 20th DAY OF September 2018

SCOTT MORRISON
Treasurer
Appendix B: List of submissions received

Agriculture Industries Energy Taskforce, Submission to ACCC discussion paper: Monitoring of electricity supply in the National Electricity Market, 19 December 2018.

AGL, Response to ACCC Monitoring of electricity supply in the National Electricity Market discussion paper, 20 December 2018.


Business SA, Submission to ACCC, 19 December 2018.


Department of State Growth (Tasmania), ACCC Monitoring of electricity supply in the NEM—Discussion Paper, 2 January 2019.


Energy Networks Australia, Submission to the monitoring of electricity supply in the National Electricity Market discussion paper, 19 December 2018.


Hydro Tasmania, Monitoring of electricity supply in the NEM, 21 December 2018.

Meridian Energy Australia, ACCC monitoring of electricity supply in the NEM, 19 December 2018.

National Farmers’ Federation, ACCC discussion paper on monitoring of electricity supply in the NEM, 19 December 2018.


Public Interest Advocacy Centre, Submission to Discussion Paper on monitoring of electricity supply in the National Energy Market (NEM), 20 December 2018.

Queensland Competition Authority, Submission: ACCC monitoring of the National Electricity Market, 19 December 2018.


## Appendix C: REPI recommendation progress

<table>
<thead>
<tr>
<th>No.</th>
<th>Short-form recommendation</th>
<th>Full recommendation</th>
<th>Stage of progress</th>
<th>Notes</th>
<th>Next milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prevent acquisitions that would result in greater than 20% generation ownership</td>
<td>The NEL should be amended to prevent any acquisition or other arrangement (other than investment in new capacity) that would result in a market participant owning, or controlling dispatch of, more than 20 per cent of generation capacity in any NEM region or across the NEM as a whole. The provision should be designed to prevent market participants circumventing the 20 per cent cap, including by way of ownership structure or contractual arrangements.</td>
<td>Some progress</td>
<td>ESB has released a consultation paper to inform its advice to the COAG Energy Council.</td>
<td>COAG to consider ESB advice.</td>
</tr>
<tr>
<td>2</td>
<td>Divide Queensland generators into three similar portfolios and ensure they are separately owned</td>
<td>The Queensland Government should divide its generation assets into three generation portfolios to reduce market concentration in Queensland. The three portfolios should be of a similar size with a mix of generation assets to maximise competition in the wholesale market. Once created, the Queensland Government should ensure that the three portfolios are separately owned and operated to maximise competition in the wholesale electricity market. The sale of any portfolios should be in line with recommendation 1.</td>
<td>Progressing but different to REPI recommendation</td>
<td>Queensland Government has announced CleanCo, a third state-owned generator with a primarily renewable asset base. The Queensland Government has said it has no intention to sell any state-owned assets.</td>
<td>CleanCo to begin operations in mid-2019.</td>
</tr>
<tr>
<td>3</td>
<td>Give the AER powers to address market manipulation</td>
<td>The NEL should be amended to provide the AER with powers to address behaviour which has the effect of manipulating the proper functioning of the wholesale market, together with the necessary investigation powers and appropriate remedies. The current market manipulation powers in respect of gas market supply hubs represent a good framework for equivalent powers in respect of the electricity market.</td>
<td>Progressing but different to REPI recommendation</td>
<td>New prohibition in Treasury Laws Amendment (Prohibiting Energy Market Misconduct) Bill 2018.</td>
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</tr>
<tr>
<td>No.</td>
<td>Short-form recommendation</td>
<td>Full recommendation</td>
<td>Stage of progress</td>
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| 4   | Underwrite investment in new generation capacity              | The Australian Government should operate a program under which it will enter into low fixed-price (for example, $45–50/MWh) energy offtake agreements for the later years (say 6–15) of appropriate new generation projects which meet certain criteria. In doing so, project developers will be able to secure debt finance for projects where they do not have sufficient offtake commitments from C&I customers for later years of projects. This will encourage new entry, promote competition and to enable C&I customers to access low-cost new generation.  

The program should operate for at least a four-year period, with support provided for qualifying projects. To qualify, a project proposal must:  
- have at least three customers who have committed to acquire energy from the project for at least the first five years of operation  
- not involve any existing retail or wholesale market participant with a significant market share (say a share of 10 per cent or more in any NEM region)  
- be of sufficient capacity to serve the needs of a number of large customers  
- be capable of providing a firm product so that it can meet the needs of C&I customers. | Progressing but different to REPI recommendation | Government has received 66 ROIs for underwriting new generation investments. | Detailed design of the program expected in the first half of 2019. |
| 5   | Commit to the National Energy Guarantee                       | The National Energy Guarantee seeks to provide a settled policy framework under which new investment is incentivised in a way that enables achievement of the objective of reducing carbon emissions at low-cost while promoting investment in a manner that ensures demand for energy is met.  

The ACCC agrees that this is an important policy objective and, with the policy incorporating appropriate safeguards for competition in the contract market, recommends that governments commit to develop and implement the National Energy Guarantee. | Some progress | The Retailer Reliability Obligation is proceeding without the emissions requirements from the National Energy Guarantee. | Subordinate legislation to be developed. |
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<tr>
<th>No.</th>
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<th>Stage of progress</th>
<th>Notes</th>
<th>Next milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Amend the NEL to require reporting of OTC trades</td>
<td>The NEL should be amended so as to require the reporting of all over-the-counter (OTC) trades to a repository administered by the AER. Reported OTC trades should then be disclosed publicly in a de-identified format that facilitates the dissemination of important market information without unintentionally revealing the parties involved. The requirement should be implemented to align with (or be eligible for) any OTC reporting requirements under the NEG. The AER, AEMC and AEMO should have access to the underlying contract information, including the identity of trading partners.</td>
<td>Some progress</td>
<td>The ESB publicly consulted on this recommendation and reported its findings to COAG EC in December 2018. ESB has released a consultation paper for recommendation 41 to inform its advice to the COAG Energy Council.</td>
<td>ESB to report back to COAG.</td>
</tr>
</tbody>
</table>
| 7   | The AEMC should introduce market-making obligations in South Australia for vertically integrated retailers | The AEMC should introduce market-making obligations in South Australia, which require large, vertically integrated retailers to make offers to buy and sell specified hedge contracts each day, in order to boost hedge market activity. The parameters of a market-making obligation should have regard to:
- the size of the South Australian market
- the distribution of generation ownership in the region
- the benefits to market liquidity and efficiency of regular trading activity
- the burden of the requirements on obligated entities
- any impact on the incentives of intermittent generators to invest in firming technology.
After an appropriate period of time (for example, after two years) the mechanism should be assessed for its effect on market activity, liquidity and risk to determine if it should be continued, amended or removed in South Australia and, potentially, extended to other NEM regions. | Some progress | The ESB publicly consulted on this recommendation in 2018. The AEMC is considering a rule change request for market-making obligations across NEM. The ASX will be introducing voluntary market-making by July 2019, with two participants in SA. | ESB to report back to COAG. |
<p>| 8   | Shorten timeframes for retailer notification of customer transfers | AEMO amend its rules and procedures so that losing retailers are only given a loss notification on the actual date of transfer of financial responsibility for the customer to the new retailer. This will limit the opportunity of ‘losing’ retailers to conduct ‘save’ activity before a customer transfer has taken place. | Limited progress | AEMO and AEMC to consider implementation. | |
| 9   | Speed up customer transfers between retailers | The AEMC should make changes to speed up the customer transfer process, for example by enabling customers to use self-reads of their electricity meters. This will ensure that customers move to new offers quickly and will limit the time available for ‘losing’ retailers to conduct ‘save’ activity. | Limited progress | AEMO and AEMC to consider implementation. | |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Short-form recommendation</th>
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<th>Notes</th>
<th>Next milestone</th>
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</thead>
<tbody>
<tr>
<td>10</td>
<td>Do not reintroduce limited merits reviews</td>
<td>The ACCC supports the removal by the Australian Government of limited merits review of AER revenue decisions. Limited merits review of AER decisions should not be reinstated in the future.</td>
<td>Adopted and implemented</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 11  | State governments should write down network assets | The governments of Queensland, NSW and Tasmania should take immediate steps to remedy the past over-investment of their network businesses in order to improve affordability of the network. With appropriate assistance from the Australian Government, this can be done:  
- in Queensland, Tasmania and for Essential Energy in NSW, through a voluntary government write-down of the regulatory asset base  
- in NSW, where the assets have since been fully or partially privatised, through the use of rebates on network charges (paid to the distribution company to be passed on to consumers) that offset the impact of over-investment in those states.  
Such write-downs would enhance economic efficiency by reducing current distorting price signals. The amount of the write-downs and rebates should be made by reference to the estimates of overinvestment by the Grattan Institute, and should result in at least $100 a year in savings for average residential customers in those states. | No progress |       |               |
| 12  | The AER should be given the power to monitor the effect of write-downs on retail prices | The AER should be given the power to monitor the effect of the write-downs and rebates on network charges effectively faced by retail customers. | No progress |       | Dependent on the progress of recommendation 11. |
| 13  | Amend the NER to allow stranded asset costs to be shared | The National Electricity Rules should explicitly allow for a process whereby network assets may be stranded and the costs of that stranding is shared between users and networks. The AEMC should determine the definition of ‘stranding’ and how the costs of ‘stranding’ can be shared. | No progress |       |               |
The ACCC considers that steps should be taken to accelerate the take up of cost-reflective network pricing. Governments should agree to mandatory assignment of cost-reflective network pricing on retailers, ending existing opt-in and opt-out arrangements. Mandatory assignment of the network tariff should apply for all customers of a retailer that have metering capable of supporting cost-reflective tariffs (that is, a smart or interval meter). Retailers should not be obligated to reflect the cost-reflective network tariff structure in their customers’ retail tariffs, but should be free to innovate in the packaging of the network tariff as part of their retail offer.

Given the potential for negative bill shock outcomes from any transition to cost-reflective network tariffs should retailers pass these network tariffs through to customers, governments should legislate to ensure transitional assistance is provided for residential and small business customers. This assistance should focus on maximising the benefits, and reducing the transitional risks, of the move to cost-reflective pricing structures. This includes:

- a compulsory ‘data sampling period’ for consumers following installation of a smart meter
- a requirement for retailers to provide a retail offer using a flat rate structure
- additional targeted assistance for vulnerable consumers.

Demand tariffs, which charge retailers based on their customers’ maximum demand during pre-determined typical system peak times, represent an appropriate structure for the initial mandatorily assigned network tariffs. This tariff structure provides a balance of the objectives of cost reflectivity, simplicity and price certainty.

We note that the extent to which cost-reflective tariffs can be introduced is limited to the extent that a retailer’s customers have smart (or interval) meters. We therefore note the importance of recommendation 15 in achieving outcomes in this area.

Governments should appropriately fund communication campaigns around the benefits of cost-reflective pricing and smart meters to build community acceptance and awareness of individual and community wide benefits, as well as customer awareness of their rights.
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| 15  | Support the take up of smart meters | The ACCC considers that steps should be taken to support the take up of smart meters, and ensure customers receive the benefits of this technology. In particular:  
  - governments should regularly audit the rollout of smart meters to ensure:  
    - the rollout continues at an acceptable pace  
    - that no gaps emerge in respect of customers’ ability to access meters  
    - that consumers do not experience problems with the smart meters that are installed.  
  - the AER should require retailers, as a part of their market performance reporting, to report on their smart meter community and customer engagement strategy to ensure retailers are delivering the expected customer benefits associated with smart meters, and meeting community expectations in how the rollout is undertaken  
  - the AER should require retailers, as a part of their hardship program, to include policies on how they will support customers with smart meters in payment difficulty through targeted advice or services  
  - jurisdictions should remove regulatory requirements that limit the benefits and full functionality of smart meters. | Limited progress | COAG to consider in 2019. |
| 16  | Transfer responsibility for setting network reliability requirements to the AER | Responsibility for setting network reliability requirements should be placed on the AER or other NEM market body, based on a value of customer reliability (VCR) methodology. The responsible market body must ensure changes to requirements are in line with customer preferences on affordability. | No progress | |
| 17  | Simplify regulatory framework and continue to minimise framework complexity when amending rules | The AEMC should:  
  - as part of its annual network regulatory framework review, examine areas which can reduce the complexity of the existing framework and the time needed to implement changes  
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<td>18</td>
<td>AEMC consider moving more of the framework out of regulations and into AER guidelines</td>
<td>To further assist with reducing the complexity of the rules and improving the timely adaptability of the framework, consideration should be given by the AEMC as part of its ongoing reviews of the NER to areas where the NER can be amended to make greater use of AER guidelines, rather than the codification of detailed regulatory assessment methodologies and processes within the NER. The AER should be able to initiate reviews of its guidelines to ensure they evolve with market developments and best regulatory practice. This additional flexibility will mean that regulatory proposal assessment methodologies are able to be kept up to date without always needing a rule change process. Guidelines could only be developed within the scope of the rules and in accordance with the processes set out in the rules. The AEMC could consider the impact on the overall framework of any changed or new guidelines as part of its annual network regulatory framework review.</td>
<td>Some progress</td>
<td>COAG EC considering.</td>
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<td>19</td>
<td>Remove government specific charges that do not relate to the provision of network services</td>
<td>Governments should remove jurisdictional specific costs (taxes) that do not relate to the provision of network services. For example, Victoria should remove the easement land tax included in AusNet Services' transmission network costs.</td>
<td>No progress</td>
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<td>20</td>
<td>The AER should have more flexibility in making regulatory determinations</td>
<td>The NER should be amended to allow the AER more flexibility in undertaking the process of making regulatory determinations. This should allow for streamlined and more efficient assessment of network costs and allow the framework to adapt to the changing role of networks in providing electricity to consumers. Greater flexibility would allow the AER to better take into account any agreements between customers and networks, and use processes that are better aligned with the quality of the proposal, reducing regulatory burden on businesses and consumers. This in turn will incentivise networks to better engage with their consumers, improving engagement and consumer outcomes.</td>
<td>Limited progress</td>
<td>COAG to consider in 2019.</td>
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| 21  | Third parties should be able to offer demand response directly into the wholesale market | In relation to wholesale demand response, a mechanism should be developed for third parties to offer demand response directly into the wholesale market. Design of the mechanism should commence immediately, building on work undertaken in the AEMC’s Reliability Frameworks Review.  
   The mechanism should:  
   ▪ promote competition through allowing the widest range of businesses to directly offer demand response services  
   ▪ not allow retailers to limit the ability of their customers to engage a third-party demand response provider (to the extent it is not inconsistent with the retail contract)  
   ▪ ensure load and generation response are valued appropriately based on the benefit they provide to the wholesale market  
   ▪ limit technical requirements placed on the customer that may inhibit take up or scope of these services (for example, requirements for multiple meters at the customer site). | Some progress     | The AEMC has commenced a rule change review, with three rule change proposals from the SA Government, PIAC and the AEC.                                                                                                                                   | The AEMC’s final determination is expected in November 2019.                                    |
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| 22  | Promote greater network utilisation of demand response | In relation to network demand response:  
- The AER, in undertaking the revenue determination process, should include a more explicit focus on assessing the efficient use of non-network expenditure. This should involve a robust assessment of a network business’s actual and proposed non-network expenditure, including a comparison of the overall proportions of non-network expenditures against the network’s capital expenditure, and benchmarking across businesses. Further, consultation by the AER and networks through the process should include engagement with third-party demand response providers.  
- Distribution businesses should apply to the AER for early application of the new DMIS (ahead of their next regulatory determination) to bring forward incentives for greater use of demand response. The DMIS and DMIA should also be extended to transmission businesses.  
- The AEMC should consider in its annual review of the electricity network economic regulatory framework whether network assets are being used efficiently to provide benefits in addition to distribution services (for example, as a substitute for generation in the wholesale, RERT or FCAS markets). This assessment should explore whether:  
  - clarification is needed of what services can be provided directly by network businesses in contestable markets  
  - there are any aspects of the existing framework or technical barriers that prevent network assets being used to provide efficient non-distribution services  
  - the shared asset arrangements provide for a reasonable share of value extracted from the provision of non-distribution services flowing to customers  
  - it is appropriate for some non-distribution services (such as voltage control) to be obtained from network assets under direction from AEMO rather than procured through competitive markets. | Limited progress | AusNet Services, Energex and Ergon Energy have been approved for early access to the DMIS. Relevant to recommendation 13. |
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| 23  | Improving regulatory certainty around stand-alone power systems | In relation to stand-alone systems, immediate work should be undertaken to identify and implement changes to the NEL and NER, and the NERL and NERR, to allow distributors to develop off-grid supply arrangements for existing customers or new connections where efficient. These arrangements should:  
- subject customers under these arrangements to equivalent costs and protections as if they were connected to the grid, including in respect of the obligation to supply, reliability and security of supply  
- be adopted on a consistent basis across the NEM, replacing current state-based regulation of off-grid systems  
- be operated under a contestable framework, with distribution businesses restricted to operating them through ring-fenced entities. | Some progress | The AEMC is undertaking review of the regulatory frameworks for stand-alone power systems. There are two priorities—Priority 1 and Priority 2. Priority 1 is to develop a national framework to facilitate the transition of grid-connected customers to SAPS supply provided by the current Distribution Network Service Provider, as well as a mechanism for the transition of grid-connected customers to third-party SAPS supply. Priority 2 is to develop a national framework for the ongoing regulation of third SAPS. | Final report for priority 1 by 31 May 2019, and a final report for priority 2 by 31 October 2019. |
<p>| 24  | Abolish the SRES by 2021 | The small-scale renewable energy scheme should be wound down and abolished by 2021. | No progress | | |</p>
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| 25  | States should absorb costs from premium solar feed-in tariff schemes | To reduce the costs associated with premium solar feed-in tariff schemes:  
▪ any costs remaining from such schemes should be borne by state governments through their budgets, as Queensland has done for the next three years, rather than being recovered through charges to electricity users, and this should be done on a permanent basis  
▪ where a premium solar FiT scheme has finished, as is the case in NSW, the collection of charges previously used to pay FiTs through network premiums should also end  
▪ ongoing scheme eligibility rules should be reviewed and tightened to ensure that costs of these schemes are minimised. | Limited progress | | |
<p>| 26  | Victoria should join the National Energy Customer Framework (NECF) | Victoria should join the National Energy Customer Framework (NECF) to streamline regulatory obligations on retailers in the NEM and reduce retailers’ costs to serve. In any interim period before joining the NECF, Victoria should take steps to harmonise its regulatory approach with the NECF. | No progress | | |
| 27  | States should review NECF derogations to apply consistent framework | Each NECF jurisdiction should review its derogations from the NECF and unwind any derogations that are not based on jurisdiction-specific characteristics or needs that cannot be met by NECF-wide rules. | No progress | COAG to consider. | |
| 28  | Future derogations from the NECF should be limited | Future derogations from the NECF should be limited to situations where there are jurisdiction-specific needs that cannot be addressed by a NECF-wide rule change. | No progress | | |
| 29  | Make end of contract notices consistent with end of benefit notices | The requirements for notices sent by retailers to customers prior to the end of a contract should be consistent with the new requirements for expired benefit notices. | Some progress | COAG EC considering. | Rule change request. |</p>
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| 30  | Introduce the default market offer | In non-price regulated jurisdictions, the standing offer and standard retail contract should be abolished and replaced with a default market offer at or below the price set by the AER.  
- Designated retailers, as defined in the NERL, should be required to supply electricity to consumers under a default offer on request, or in circumstances where the consumer otherwise does not take up a market offer.  
- The default offer should contain simple pricing, minimum payment periods, and access to bill smoothing and paper bills.  
- The AER should be given the power to set the maximum price for the default offer in each jurisdiction. This price should be the efficient cost of operating in the region, including a reasonable margin as well as customer acquisition and retention costs.  
- The default offer should be used by retailers in all circumstances where a standing offer is currently used. This includes circumstances where a consumer has moved into a premises but has not contacted the retailer, where a consumer has not selected a market offer before the expiry of a market contract, and where a consumer is switched through a retailer of last resort event. | Significant progress | Australian Government has announced that it intends to introduce a default offer and reference price through the Competition and Consumer (Industry Code—Electricity Retail) Regulations 2019 (the Code) by 1 July 2019.  
The Australian Government has released for public consultation the draft Electricity Retail Code to implement the DMO and reference price.  
The Victorian Government is also introducing a default offer (Victorian Default Offer (VDO)) on 1 July 2019.  
AER’s DMO draft DMO determination was released for public consultation on 23 February 2019.  
VDO to be in place by 1 July 2019. | AER price determination complete by 30 April 2019.  
AER default market offer (DMO) and reference offer to be in place by 1 July 2019.  
VDO to be in place by 1 July 2019. |
| 31  | Apply the Consumer Data Right to the electricity sector | The application of the consumer data right to the electricity sector should be pursued as a priority under the consumer data right framework regulated by the ACCC. Consumers and their authorised representatives should have access to at least historical consumption data, product data, meter data and customer data. | Some progress | On 25 February the ACCC published a consultation paper seeking stakeholder views on CDR in the energy sector.  
The three options considered in this paper are AEMO centralised model, AEMO gateway model and Economy-wide CDR model. | |
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| 32  | Discounts should be advertised against an AER reference bill | If a retailer chooses to advertise using a headline discount claim it must calculate the discount from the reference bill amount published by the AER.  
- The AER should publish a reference bill amount for each distribution zone using AER bill benchmarks for medium (2–3 person) households and the price set by the AER for default offers (recommendation 30).  
- Retailers must calculate all discounts off the reference bill, including win-back and retention offers that have discounts attached to them.  
- Headline discounts in advertising must only include guaranteed (unconditional) discounts. | Significant progress | Refer to recommendation 30. |
<p>| 33  | Limit conditional discounts to reasonable expected savings | Conditional discounts should be no higher than the reasonable savings that a retailer expects that it will make if a consumer satisfies the conditions attached to the discount. Retailers should bear the onus of substantiating that the conditional discount is reasonable. | Significant progress | Minister for Energy has submitted a rule change proposal to the AEMC. The rule change will limit conditional discounts for both gas and electricity retail offers to reasonable costs. Under the proposed rule change, retailers would also be prevented from affecting customers twice with a late payment fee and withdrawing pay-on-time discount. |
| 34  | Introduce a mandatory code of conduct for comparator sites | The Australian Government should prescribe a mandatory code of conduct for third-party intermediaries, which addresses the issues discussed in chapter 14. For example, offers should be recommended based on price benefit to the consumer rather than the size of the commission received by the third-party. The code should contain civil penalty provisions for any breaches. | Some progress | In August 2018, the then Treasurer announced that the Government will accept the ACCC recommendation to establish a mandatory code of conduct for energy comparator websites. |
| 35  | Allow consumers to provide consent for third parties to access their data | Consumers should be able to provide their consent to third-party intermediaries to give EIC on their behalf. The mandatory code (recommendation 34) should outline the process that third-party intermediaries must undertake to ensure that they give EIC in a way that satisfies retailers’ obligations under the NERL. | No progress | |</p>
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<td>36</td>
<td>Provide funding to promote Energy Made Easy and the Victorian Energy Compare site</td>
<td>The Australian Government and Victorian Government should commit to ongoing funding to raise awareness of the government-run comparator websites similar to the approach taken in New Zealand with the ‘What’s My Number’ campaign.</td>
<td>Some progress</td>
<td>Victorian Government Power Saving Bonus program offers $50 for households that use the Victoria Energy Compare website in FY2018–19.</td>
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| 37  | Improve concession schemes | COAG should improve concession schemes across the NEM to ensure that, to the extent possible, there is a uniform, national approach to electricity concessions. Concession schemes should:  
- be means tested to ensure that they are targeted at those most in need  
- include a fixed dollar amount to offset daily supply charges and a percentage discount to offset variable usage charges  
- only require consumers to reapply for concessions where this is necessary for the administration of the concession scheme. | No progress | |
| 38  | Provide funding for energy literacy | In addition to existing funding, the Australian Government and the relevant state or territory government should fund (to a value of $5 per household in each NEM region, or $43 million NEM-wide, per annum) a grant scheme for consumer and community organisations to provide targeted support to assist vulnerable consumers to improve energy literacy. This grant scheme should be modelled on the approach taken by the Queensland Council of Social Services in administering the Switched on Communities program. This targeted support will assist vulnerable consumers to participate in the retail electricity market and choose an offer that suits their circumstances. | Some progress | Victoria’s Home Energy Assist program helps households reduce their energy consumption and determine whether they are receiving the best deal on energy bills.  
The Energy Brokerage Pilot (supported by Victorian Government and run by Brotherhood of St Lawrence) offers assistance to find and switch to a better energy offer. |
| 39  | The AEMC makes the hardship rule change | The hardship rule change, proposed by the AER, should be made. This would allow the AER to issue an enforceable hardship guideline that stipulates what retailers must include in hardship policies, and require retailers to amend their hardship policies to meet the guideline. This new rule should be a civil penalty provision. | Significant progress | AEMC rule change complete.  
AER guideline to be implemented in 2019.  
AER draft guideline released 4 Feb 2019. |

Final guideline to be published by 1 April 2019.
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| 40  | Better price monitoring  | Retail price monitoring should be streamlined, strengthened and appropriately funded to ensure greater transparency in the market, reduced costs, and allow governments to more effectively respond to emerging market issues. This should be done by:  
  - COAG Energy Council agreeing to streamline price monitoring and reporting to the AER and the AER receiving all the necessary powers to obtain information from retailers  
  - COAG Energy Council agreeing to extend price reporting for retail electricity services to small to medium business customers  
  - State governments agreeing to close their own price reporting and monitoring schemes in favour of an expanded and strengthened NEM-wide regime customers.  
A NEM-wide price reporting and monitoring framework be implemented which includes a combination of price monitoring with full EBITDA data (including standardised costs to serve, attract and retain consumers, and margins), and consumer expenditure surveys. This reporting should be done on a regular basis and include customer expenditure data, based on representative customer surveys and retailer billing and offer data, and be reflective of demographic information. | Significant progress | Treasury has tasked the ACCC with price monitoring through an inquiry from 2018-2025. | |
<p>| 41  | Expand AER market monitoring to include the contract market | The AER’s wholesale market monitoring should be expanded and appropriately funded to include monitoring, analysing and reporting on the contract market. This should include analysing the data reported to the OTC repository (recommendation 6), ASX data and data gathered directly from generators and retailers (including through the use of compulsory information gathering powers). | Some progress | Linked to recommendation 6. ESB has released a consultation paper to inform its advice to the COAG Energy Council. ACCC monitoring direction includes the contract market. | |</p>
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| 42  | Boost civil penalties to levels being considered for the ACL | The COAG Energy Council should adopt all the suggested increased penalties to all civil penalty provisions listed in the consultation paper as a matter of priority, but instead of increasing the amount to $1 million as proposed, increases should be to the same levels as parliament is currently considering for the ACL ($10 million, three times the benefit gained or 10 per cent of turnover). The civil penalties suggested for increase to the maximum level across the NEL, NER, NERL and NERR relate to provisions listed in the consultation paper, such as:  
- information required for projected assessment of system adequacy  
- limitations on generators’ technical parameters—requirements only apply in certain circumstances  
- key requirements that generators must meet, regardless of the circumstances of their plant  
- the requirement to advise AEMO if a situation changes, and keep AEMO continuously informed obligations with respect to life support customers  
- wrongful disconnection by a retailer or network service provider  
- requirement to implement hardship policy  
- explicit informed consent requirements for certain transactions. | Some progress | COAG EC considering. | Legislation to be drafted. |
<p>| 43  | Boost the rebidding penalty to levels being considered by the ACL | The rebidding rules that currently attract civil penalties of $1 million should also be increased to the new higher level penalties, and that the wholesale provisions arising from the ACCC recommendations 1 and 3 associated with the conduct of participants under the NEL are increased to the same level as well and that these provisions also be subject to disgorgement (ill-gotten gain) penalties. | Some progress | Refer to recommendation 42. |
| 44  | Allow the AER to seek community service and other orders | The COAG Energy Council should amend the energy laws in line with the current recommendations before the COAG Energy Council to allow the AER to seek community service orders, probation orders, and adverse publicity orders, as well as enabling the AER to seek that a third-party is required to undertake a community service order. | Some progress | Refer to recommendation 42. |
| 45  | Allow the AER to compel oral evidence | The COAG Energy Council should provide the AER with the power to require individuals to give evidence before it. | Some progress | Refer to recommendation 42. |</p>
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| 46  | Introduce a lower penalty level for minor breaches of certain provisions | The COAG Energy Council should amend the energy enforcement regime to:  
- permit the AER to issue a new lower level infringement penalty ($5000) for minor breaches of certain provisions for the NERL and NERR in addition to the current $20 000 infringement penalty for current provisions. The COAG Energy Council should identify provisions most suited to lower levels of penalty or provisions directed at smaller market participants like exempt sellers  
- increase penalties for destroying evidence or providing false or misleading information to the AER under its information gathering powers to levels equivalent to the ACL. | Some progress | Refer to recommendation 42. | |
| 47  | COAG EC to develop ministerial principles to guide consumer protection regulation | The COAG Energy Council should develop a set of ministerial principles that inform rule changes and ministerial decisions relating to consumer protection regulation, including requirements to:  
- reduce regulatory complexity where appropriate and focus regulation on consumer outcomes  
- ensure consumers have access to necessary information and resources to make informed decisions  
- promote fair and reasonable treatment of consumers in day-to-day engagement with market participants  
- reduce the risk of inequity in outcome between consumers in the retail market  
- ensure regulatory flexibility to support technological and market innovation  
- understand the needs of vulnerable consumers and supporting their increased participation in the market. | Some progress | COAG EC considering. | |
<p>| 48  | Review the NECF by 2022 | The COAG Energy Council should undertake a review of the effectiveness of the NECF three years after the implementation of the inquiry recommendations and no later than four years after the release of this report. | Some progress | COAG EC considering. | |
| 49  | Extend the default offer to SMEs | The ACCC's recommendation to abolish the standing offer and replace it with a ‘default offer’ at or below a price set by the AER (recommendation 30) should be extended to all generally available offers including offers for SME customers. | Significant progress | Refer to recommendation 30. | |</p>
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<td>50</td>
<td>Discounts should be calculated from a reference bill for SMEs</td>
<td>The ACCC’s recommendation that all discounts must be calculated from a reference bill amount set by the AER (recommendation 32) should be extended to all generally available offers including offers for SME customers. The AER should develop a process for determining a benchmark for representative usage levels for an average SME customer. Similarly, restricting conditional discounts to the reasonable savings that a retailer expects to make if a consumer satisfies the conditions (recommendation 33) should also apply to offers for small business.</td>
<td>Significant progress</td>
<td>Implementation is dependent on recommendation 30. Refer to Rec 32 for the reference price component. Refer to Rec 33 for the discounting rule change component.</td>
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<td>51</td>
<td>Governments and market bodies should develop specific electricity market awareness campaigns targeted at small business customers</td>
<td>Governments and market bodies should develop specific electricity market awareness campaigns targeted at small business customers. As part of these communication campaigns governments and market bodies should look at how it can channel marketing material through departments and agencies that service small business (such as small business representative groups) as well as existing channels of communication for energy.</td>
<td>Limited progress</td>
<td>For review by COAG.</td>
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| 52  | State and territory funding for SME electricity advice | State and territory governments should fund small business organisations to provide tailored retail electricity market advice. The fund should total $10 million over three years and be awarded on a competitive basis to small business representative organisations providing information, tools and advice to small businesses on retail electricity choices. This program could support individualised bill checking services and development of tools to help small businesses make better energy choices. | Significant progress | The Commonwealth has announced $11.6 million Business Energy Advice Program (BEAP). There are two components to the Program:  
- An energy advisory service ($10 million over 3 years), where the Australian Government will procure a roll out partner/s to deliver help to small businesses to understand their energy saving opportunities and more effectively switch retailers.  
- An energy benchmarking tool ($1.6 million), where the Australian Government will develop a digital application that allows small businesses to compare their energy use and costs against their peers. Tender held for energy advisory service. | For review by COAG. |
<p>| 53  | Review of SME experiences in two years | After two years, the COAG Energy Council should review industry efforts to assist small businesses experiencing payment difficulties. The review should take into account metrics like customer satisfaction, disconnection levels and average debt levels for small businesses. The review should determine if industry-led improvements are effective or whether changes to the NERL are necessary to require retailers to have a hardship policy for small businesses. | Some progress | For review by COAG. |</p>
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<td>54</td>
<td>Streamlined price reporting for SMEs</td>
<td>The ACCC’s recommendation in respect of improved and streamlined price reporting (recommendation 40) should include expanded reporting for small to medium business. Price reporting for businesses should be consistent with residential electricity price reporting and retailer cost reporting. The expanded and streamlined reporting process would also allow for disaggregated data on business customer switching trends, reporting on what SMEs are paying, and reporting on the kinds of offers they are on.</td>
<td>Limited progress</td>
<td>Refer to recommendation 40.</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>State and territory governments to promote energy ombudsmen schemes for SMEs</td>
<td>State and territory governments should provide resourcing toward promoting energy ombudsman schemes as a part of a broader marketing campaign to build small business engagement with retail electricity markets.</td>
<td>No Progress</td>
<td>For consideration by individual state or territory governments.</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>Provide government assistance for SMEs transitioning to cost reflective tariffs</td>
<td>Governments should make available well targeted assistance programs including energy efficiency audits to assist the businesses most adversely impacted by the transition to more cost network reflective tariffs.</td>
<td>Limited Progress</td>
<td>Linked to recommendation 14.</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix D: Potential indicators for future monitoring

<table>
<thead>
<tr>
<th>Topic</th>
<th>What we are likely to monitor</th>
<th>Likely data sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retail</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Retail market structure</strong></td>
<td>Number of retailers</td>
<td>AER and ESC Vic, and other publicly available information where necessary</td>
</tr>
<tr>
<td></td>
<td>Market share of retailers</td>
<td>AER and ESC Vic, and other publicly available information where necessary</td>
</tr>
<tr>
<td></td>
<td>Number of retailers that are vertically integrated</td>
<td>AER and ESC Vic, and other publicly available information where necessary</td>
</tr>
<tr>
<td></td>
<td>Length of tenure of customers for the ‘big three’ retailers compared to other retailers</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>Observations about concentration in the retail market and barriers to competition, entry and</td>
<td>Public reports and information and comments or surveys from market participants</td>
</tr>
<tr>
<td></td>
<td>expansion and any emerging issues</td>
<td></td>
</tr>
<tr>
<td><strong>Retailer advertising</strong></td>
<td>Number or proportion of ‘standing’ offers and ‘market’ offers</td>
<td>AER (Energy Made Easy) and DELWP (Victorian Energy Compare), and other publicly</td>
</tr>
<tr>
<td><strong>practices</strong></td>
<td></td>
<td>available information where appropriate</td>
</tr>
<tr>
<td></td>
<td>Number or proportion of ‘market’ offers with no discounts attached</td>
<td>AER (Energy Made Easy) and DELWP (Victorian Energy Compare), and other publicly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>available information where appropriate</td>
</tr>
<tr>
<td></td>
<td>Number or proportion of ‘market’ offers with unconditional discounts, including the type and</td>
<td>AER (Energy Made Easy) and DELWP (Victorian Energy Compare), and other publicly</td>
</tr>
<tr>
<td></td>
<td>level of discount</td>
<td>available information where appropriate</td>
</tr>
<tr>
<td></td>
<td>Number or proportion of ‘market’ offers with conditional discounts, including the type and</td>
<td>AER (Energy Made Easy) and DELWP (Victorian Energy Compare), and other publicly</td>
</tr>
<tr>
<td></td>
<td>level of discount and the effect if conditions are not met</td>
<td>available information where necessary</td>
</tr>
<tr>
<td></td>
<td>Number or proportion of customers on the various types of ‘market’ offers, and the number</td>
<td>AER and ESC Vic, and ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>or proportion of customers who did not achieve available discounts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Observations about the advertising practices of retailers, particularly in relation to ‘headline’</td>
<td>Public reports and information and comments or surveys from market participants</td>
</tr>
<tr>
<td></td>
<td>discounts and any other related issues</td>
<td></td>
</tr>
<tr>
<td>Topic</td>
<td>What we are likely to monitor</td>
<td>Likely data sources</td>
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<tr>
<td>----------------------------------------------------------------------</td>
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</tr>
<tr>
<td><strong>Retail prices, including level and spread of price offers</strong></td>
<td>Level and spread of ‘standing’ offer or DMO/VDO prices and the average annual bill that results</td>
<td>AER (Energy Made Easy) and DELWP (Victorian Energy Compare), and other publicly available information where appropriate</td>
</tr>
<tr>
<td></td>
<td>Number or proportion of customers on ‘standing’ offer or DMO/VDO prices</td>
<td>AER and ESC Vic, and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Level and spread of ‘market’ offer prices and the average annual bill that results</td>
<td>AER (Energy Made Easy) and DELWP (Victorian Energy Compare), and other publicly available information where appropriate</td>
</tr>
<tr>
<td></td>
<td>Number or proportion of customers on ‘market’ offer prices</td>
<td>AER and ESC Vic, and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Analysis of actual prices paid by customers, such as average price (i.e. retailer revenue / number of customers) or actual bills and whether conditional discounts have been achieved</td>
<td>Public financial statements of retailers and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Observations about the structure of charges, the level and spread of pricing offers and other related issues</td>
<td>Public reports and information and comments or surveys from market participants</td>
</tr>
<tr>
<td><strong>Underlying costs of a customer's bill, including retailer costs and profits</strong></td>
<td>Cost stack analysis of costs that make up the total bill for a customer</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>Analysis of total and average retailer costs</td>
<td>ACCC information gathering powers</td>
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<tr>
<td></td>
<td>Analysis of total and average CTS retail costs</td>
<td>ACCC information gathering powers</td>
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<tr>
<td></td>
<td>Analysis of total and average CARC retail costs</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>EBITDA and EBIT of retail arm of business</td>
<td>Public financial accounts and ACCC information gathering powers where appropriate</td>
</tr>
<tr>
<td><strong>Retail product and service differentiation and innovation</strong></td>
<td>Monitor developments in product and service differentiation and innovation and the extent to which these are valued by customers and have an impact on the competitive landscape</td>
<td>Public reports and information and comments or surveys from market participants</td>
</tr>
<tr>
<td><strong>Customer awareness, understanding and participation in the market</strong></td>
<td>Levels of switching between retailers and/or offers</td>
<td>AEMO and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Retailer retention and win back strategies and activity</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>Analysis of aforementioned indicators on certain customer segments, such as vulnerable/hardship/concession customers</td>
<td>As above, including ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Analysis of customer complaints and vulnerable/hardship/concession or other assistance programs</td>
<td>Public reports, and information, comments or surveys from market participants as well as ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Observations of customer awareness, understanding, participation and satisfaction in the market and other related issues</td>
<td>Public reports and information and comments or surveys from market participants</td>
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<tr>
<td><strong>Wholesale</strong></td>
<td><strong>Wholesale electricity prices</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trends in spot prices across the NEM</td>
<td>AEMO data, AER and AEMO analysis, and other public sources</td>
</tr>
<tr>
<td></td>
<td>Bidding and rebidding behaviour</td>
<td>AEMO data, ACCC information gathering powers where necessary</td>
</tr>
<tr>
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<tr>
<td><strong>Market characteristics</strong></td>
<td>Market share by capacity and generation produced</td>
<td>AEMO data</td>
</tr>
<tr>
<td></td>
<td>Generator entry and exit</td>
<td>AEMO data, AER analysis</td>
</tr>
<tr>
<td></td>
<td>Generation technology mix in the NEM</td>
<td>AEMO data, AER analysis</td>
</tr>
<tr>
<td></td>
<td>Vertical integration and transfer pricing</td>
<td>AEMO and AER data and analysis. ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Wholesale margins</td>
<td>Public financial accounts and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td><strong>Wholesale electricity costs experienced by retailers</strong></td>
<td>Wholesale costs incurred by retailers in the supply of customers, by customer type, over various time periods.</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td><strong>Contract market</strong> (to be determined in more detail, when greater clarity over AER monitoring role is available)</td>
<td>Traded volumes</td>
<td>ASX data, ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Contract market prices</td>
<td>ASX data. ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Trading activity undertaken by market participants</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td><strong>Input costs</strong></td>
<td>Trends in costs of coal and gas, and hydro water storage levels</td>
<td>Public data and analysis from AER. ACCC information gathering powers where necessary</td>
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<tr>
<td></td>
<td>Relevant bidding behaviour and wholesale prices</td>
<td>AEMO. ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td><strong>How wholesale prices are influencing retail prices</strong></td>
<td>Cost components that make up retailer bills</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>Information from retailers regarding their approach to setting retail prices</td>
<td>ACCC information gathering powers</td>
</tr>
<tr>
<td></td>
<td>Retail and wholesale prices</td>
<td>AEMO, AER, and other public sources</td>
</tr>
<tr>
<td></td>
<td>Contract market prices</td>
<td>ASX, ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td><strong>The impact of policy changes on wholesale market prices</strong></td>
<td>Progress of the wholesale REPI recommendations</td>
<td>Public information and ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Analysis of specific policy issues (other than REPI) from time to time</td>
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<tr>
<td><strong>Issues for further analysis and investigation</strong></td>
<td>Barriers to entry</td>
<td>AER analysis, including LCOE modelling. ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Bidding behaviour</td>
<td>AEMO data and AER analysis. ACCC information gathering powers where necessary</td>
</tr>
<tr>
<td></td>
<td>Market power</td>
<td>AER analysis and ACCC information gathering powers where necessary</td>
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<tr>
<td><strong>Network</strong></td>
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<tr>
<td>Network costs</td>
<td>The network cost share of an indicative customer bill</td>
<td>AER and ACCC information gathering powers where necessary</td>
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<tr>
<td></td>
<td>Impact of annual changes in network charges for average residential and small business customers</td>
<td>AER and other publicly available information where appropriate</td>
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<tr>
<td></td>
<td>The impact of new regulatory determinations on electricity prices</td>
<td>AER and other publicly available information where appropriate</td>
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<tr>
<td><strong>Regulatory asset base</strong></td>
<td>Trends in the growth of regulatory asset bases of network businesses</td>
<td>AER and other publicly available information</td>
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<td></td>
<td>Annual capital expenditure by network businesses</td>
<td>AER data and ACCC information gathering powers where necessary and other publicly available information</td>
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<tr>
<td><strong>Environmental</strong></td>
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<tr>
<td>Environmental costs</td>
<td>The cost of LRET paid by electricity consumers</td>
<td>ACCC information gathering powers</td>
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<tr>
<td></td>
<td>The cost of SRES paid by electricity consumers</td>
<td>ACCC information gathering powers</td>
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<tr>
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<td>The costs of state-based premium FiT schemes</td>
<td>AER data and ACCC information gathering powers where necessary</td>
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<td>The costs of state-based efficiency schemes</td>
<td>AER data and ACCC information gathering powers where necessary</td>
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<td><strong>LRET</strong></td>
<td>The price of Large-scale Generation Certificates</td>
<td>AEMC and other publicly-available information where appropriate</td>
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<td></td>
<td>Total renewable energy generation</td>
<td>Clean Energy Regulator, AEMC and other publicly-available information where appropriate</td>
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<tr>
<td><strong>SRES</strong></td>
<td>The price of Small-scale Technology Certificates</td>
<td>Clean Energy Regulator, AEMC and other publicly-available information where appropriate</td>
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<tr>
<td></td>
<td>The number and installed capacity of small-scale installations</td>
<td>Clean Energy Regulator, AEMC and other publicly-available information where appropriate</td>
</tr>
<tr>
<td><strong>State-based schemes</strong></td>
<td>The number of installations supported by jurisdictional schemes and the total capacity of those systems</td>
<td>Clean Energy Regulator, AEMC and other publicly-available information where appropriate</td>
</tr>
</tbody>
</table>